In The Matter Of:

Commonwealth of Mass v. Philip Morris Inc.

Nancy A. Rigotti, M.D.
Vol. 1, October 1, 1998

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COMMONWEALTH of MASSACHUSETTS
Middlesex, ss. Superior Court Department
of the Trial Court
Civil Action No. 95-7378-J
COMMONWEALTH OF MASSACHUSETTS
v.
PHILIP MORRIS INCORPORATED, et al.
Deposition of Nancy A. Rigotti, M.D.
Thursday, October 1, 1998
10:00 a.m.
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Boston, Massachusetts
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[1] NANCY A. RIGOTTI, M.D. [2] a witness called for examination by counsel for the [3] Defendant Brown & Williamson Tobacco Corporation, [4] being first duly sworn, was examined and testified [5] as follows:

[6] **EXAMINATION**

[7] **BY MR. GALE:**

[8] **Q:** Good morning, Dr. Rigotti.

[9] **A:** Hi.

[10] **Q:** I introduced myself a couple of minute ago. [11] My name is Todd Gale. I represent Brown & [12] Williamson. Have you ever had your deposition taken [13] before?

[14] **A:** No.

[15] **Q:** Let me start by stating a couple of ground [16] rules so we communicate effectively today. I am [17] sure you noticed there's a court reporter in the [18] room with us writing down everything that is being [19] said. She will produce a transcript at the end of [20] the day, and that transcript will be provided to you [21] by counsel for the Commonwealth so you will have a [22] chance to review it and see what was said.

[23] One thing you need to understand is that [24] your testimony here today on the record has the same

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[1] weight and effect as if you were to give it in a [2] court of law. Do you understand that?

[3] **A:** Yes.

[4] **Q:** The other thing you need to understand is [5] it's much easier for the court reporter if you [6] respond verbally to questions, yes rather than head [7] nods or some other form of assent.

[8] Another thing is for us to be careful [9] not to speak at the same time. The transcript will [10] be much clearer. I will do my best to make sure you [11] finish an answer before I start my next question. [12] If you can wait until I finish my question before [13] you answer it, that would make all our lives easier, [14] I believe.

[15] **A:** Yes. Okay.

[16] **Q:** Thanks. Now, I want to make sure you hear [17] and understand everything that I say. If you don't [18] hear something that I have said or if something I [19] have said is not clear to you, please tell me so, [20] and I will try to clarify it the best I can. Unless [21] you tell me that you have not heard or understood [22] part of my question, I am going to assume that you [23] hear and understand everything I ask you. Is that [24] acceptable to you?

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[1] **A:** Yes.

[2] **Q:** Now, we're here for the day, and I will be [3] asking you questions and taking testimony to try and [4] learn a little more about your expert opinion. If [5] you need a break at any time, let me know and we can [6] take a short break. If you want to get up and [7] stretch while we are still on the record, I have no [8] problem with that. It's up to you. Whatever makes [9] you comfortable is fine with me so long as the court [10] reporter can hear what we are saying and we can [11] communicate with each other effectively.

[12] **A:** I would like a lunch break, and I don't [13] think we should go for more than two hours. I can't [14] sit that long without a little break. Would that be [15] okay?

[16] **Q:** I think that will all work out fine. I [17] don't think that will be a problem at all.

[18] As you might know, we are going to be [19] deposing a number of the experts in this case for [20] two days. In your case the Commonwealth asked that [21] we limit our examination to one day, and based on [22] your disclosure and the documents that you reviewed [23] that were pointed out, we were able to accommodate [24] the Commonwealth in that request. But as a result

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[1] that means we have to pack what otherwise would be [2] two days of deposition into one day. So again I [3] will do my best to try to get through the [4] information as quickly as we can and try to keep our [5] breaks short.

[6] **A:** Okay.

[7] **Q:** Let me start —

[8] **MR. STROUSS:** Let me say regarding the [9] stipulations, objections except as to the form are [10] reserved until the time of the trial. That's the [11] Commonwealth's understanding.

[12] **MR. GALE:** Has that been the practice?

[13] **MR. STROUSS:** To my understanding.

[14] **MR. RYAN:** As well as motions to strike, [15] I believe.

[16] **MR. GALE:** I have got no problem with [17] that.

[18] (Exhibit No. 1 was marked.)

[19] **A:** Can I ask a question?

[20] **Q:** Yes, ma'am.

[21] **A:** I am curious as to everyone that is here and [22] who they represent. You represent different law [23] firms. Why are you all here?

[24] **Q:** These are all lawyers representing tobacco

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[1] companies.

[2] **MR. STILL:** I am John Still, [3] representing R.J. Reynolds.

[4] **MR. BOCCHINO:** I am Robert Bocchino from [5] Foley Hoag & Eliot re-

presenting Brown & Williamson.

[6] **MR. RYAN:** Rob Ryan, representing [7] Lorillard Tobacco.

[8] **THE WITNESS:** Thank you.

[9] **Q:** Dr. Rigotti, I have handed you what has been [10] marked as Rigotti Exhibit 1. It is the deposition [11] notice for this case, for this deposition, and the [12] main reason I have handed it to you is to ask you [13] about Schedule A in the back.

[14] Do you see under the heading " documents [15] to be produced" there are certain categories of [16] documents that we have asked you to bring with you [17] today. That black notebook in front of you, are [18] those the documents that are responsive to this [19] request?

[20] **A:** Yes.

[21] **Q:** Did you work with lawyers for the [22] Commonwealth to gather those?

[23] **A:** They were provided to me by lawyers from the [24] Commonwealth, specifically by Betsy McIntyre and

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[1] Anne Ritter.

[2] **Q:** Let me ask for example, No. 5, all [3] correspondence, reports and documents that you [4] shared or exchanged with John Hughes or Jack [5] Henningfield. Are those in that binder?

[6] **A:** I don't have any correspondence, reports or [7] documents that I exchanged with either of those two [8] that have to do with my testimony. I have had [9] conversations with them about professional matters [10] at professional meetings as part of my regular work, [11] but I haven't really — it's not specific to this [12] case. So I didn't think that would be relevant.

[13] **Q:** Okay. Did you talk to the lawyers for the [14] Commonwealth about that?

[15] **A:** Yes. We went over the list of things, and [16] after talking with them it seemed there wasn't [17] anything else for me to bring.

[18] **Q:** Okay. What's in that notebook?

[19] **A:** What's in that notebook? Shall we go [20] through it?

[21] **Q:** Just generally.

[22] **A:** What's in there is a copy of statement that [23] I made.

[24] **Q:** Your expert disclosure statement?

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[1] **A:** Yes. And the rest of it is a series of [2] industry documents which they asked me to look at [3] and give an opinion about.

[4] **Q:** Fair enough. Are all industry documents [5] that you looked at contained in that notebook?

[6] **A:** Yes.

[7] **Q:** So that I am clear, you haven't looked at [8] any documents from the files of any tobacco [9] companies other than the documents that are there in [10] the notebook in front of you?

[11] **A:** No.

[12] **Q:** Let's do this — I'm sorry. Go ahead.

[13] **A:** No.

[14] **Q:** Here's what I am going to do. I am going to [15] mark this whole set of documents that you have [16] produced as Rigotti Exhibit 2 and make them a [17] deposition to the exhibit.

[18] (Exhibit No. 2 was marked.)

[19] **A:** There is one other thing from my own files, [20] which is a review article about nicotine medicines [21] for smoking cessation that Jack Henningfield wrote. [22] I brought that in case you asked me about the [23] definition of " addiction," since I always forget one [24] of the attributes.

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[1] **Q:** I will put a sticker on this. Do you mind [2] if I put a sticker on it?

[3] **A:** No.

[4] **Q:** With your deposition transcript you will get [5] copies of the exhibits, so you will have it.

[6] **A:** It would be good for you to read.

[7] **Q:** I have read it.

[8] (Exhibit No. 3 was marked.)

[9] **MR. GALE:** I have marked as Rigotti 3 an [10] article from the New England Journal of Medicine. [11] The issue is dated November 2nd, 1995, a review [12] article by Jack Henningfield entitled " Nicotine [13] medications for smoking cessation."

[14] **Q:** I will be asking you more questions about [15] the documents in the notebook later, but I want to [16] talk about some other things first.

[17] I want to ask you a little bit about [18] your practice, if I might. I have your curriculum [19] vitae here. I will mark that as Rigotti Exhibit 4.

[20] (Exhibit No. 4 was marked.)

[21] **Q:** I will hand you a copy. The first question [22] I have for you is, do you see patients as a regular [23] part of your practice?

[24] **A:** Yes.

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[1] **Q:** Do you see patients for reasons other than [2] smoking cessation?

[3] **A:** Yes.

[4] **Q:** What percentage of your practice is devoted [5] to treating patients for reasons other than quitting [6] smoking?

[7] **A:** I am not sure I understand your question. [8] You mean of the clinical work that I do in seeing [9] people and trying to help them to get better from [10] some problem, what percent of that is not smoking- [11] cessation-related?

[12] **Q:** Yes. Let me try it a different way. [13] Viewing your entire professional commitment as 100 [14] percent, what percent of that time is related to [15] treating patients for any purpose?

[16] **MR. STROUSS:** I am going to object to [17] the form. You can answer.

[18] **A:** 20 percent, approximately.

[19] **Q:** Of that 20 percent, how much deals directly [20] with smoking cessation?

[21] **A:** I would say five percent.

[22] **Q:** So is it fair to say —

[23] **A:** Five of a hundred.

[24] **Q:** That's what I was going to clarify. So 15

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[1] percent of your total time, professional time is [2] spent treating patients for reasons other than [3] smoking cessation; is that fair?

[4] **A:** Yes.

[5] **Q:** For what other reasons do you see people?

[6] **A:** I am a general internist, and I am a primary [7] care provider, and I see patients for the range of [8] adult medical care that a primary doctor would [9] provide.

[10] **Q:** How many patients do you have in your [11] practice that you see regularly?

[12] **A:** To the best of my knowledge, about 400 [13] patients.

[14] **Q:** As part of your work with the smoking [15] cessation clinic at Massachusetts General Hospital, [16] do you work directly with patients at the smoking [17] cessation clinic?

[18] **A:** I do.

[19] **Q:** How much of your time in any given week is [20] spent dealing with patients at that facility?

[21] **A:** Directly with patients?

[22] **Q:** Yes.

[23] **A:** Perhaps two hours, one or two hours.

[24] **Q:** All right. Now, you also teach; is that

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[1] correct?

[2] **A:** Yes.

[3] **Q:** You teach at Harvard Medical School?

[4] **A:** Yes.

[5] **Q:** Do you teach anywhere else?

A: I am invited to give lectures at other medical schools and other hospitals and medical centers and other professional organizations. So I teach around the country in other places, but my primary teaching is to run a course called Preventive Medicine at Harvard Medical School, which is a second-year course.

Q: Is that a required course?

A: Yes.

Q: What percentage of your time is devoted to teaching and preparing yourself to teach?

A: I will make a rough estimate, because I am not certain. About 20 percent.

Q: You also run the smoking cessation clinic at the Massachusetts General Hospital; is that right?

A: Yes.

Q: What percentage of your time is devoted specifically to that function?

A: I would say — it's hard to answer exactly,

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because the clinic is part of a larger operation that is also a research organization to do tobacco-related research, and that is the bulk of my time.

I would say the administrative work to keep the clinic going and to oversee the nurses who deliver most of the direct care and to answer — and to consult with them about patients, would be about 10 percent.

Q: You also, as you have mentioned, do research?

A: Yes.

Q: And publish your findings in medical journals and other peer-reviewed publications; is that right?

A: Yes.

Q: What percentage of your time is related to research and writing up your research for publications?

A: I think it's about 50 percent, which is what's left, which would seem to be right.

Q: In your practice do you treat patients for dependence on any substances other than nicotine?

A: In my clinical practice I have taken care of

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people who have problems with alcohol and other drugs.

Q: Is that exclusive of people who also have issues with cigarette smoking?

A: Some also smoke, but most of the people who I see who have smoking as a problem don't have other drug problems.

Q: Let me try to parse that out a little bit. What percentage of your practice is devoted to treating people for substance dependency issues, not including nicotine?

A: Oh, it would be a very small amount, perhaps five or ten percent.

Q: You also participated in the preparation of several Surgeon General's reports as I understand it?

A: Yes.

Q: You were the scientific co-editor of the 1989 report; is that right?

A: Yes.

Q: What did you do specifically in relation to the 1989 Surgeon General's report, what were your responsibilities?

A: My responsibility was to be the editor for

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the chapter on tobacco control policy, which was the last chapter and the largest chapter in the document. It was about 150 pages. In addition, I wrote one section of that chapter.

Q: Which section was that?

A: On no-smoking policies in public places and the workplace, because that was an area of — that I had done research on at that point.

Q: Now, you also worked as a peer reviewer, as I understand it, from your CV on the 1993, 1995 and 1996 Surgeon General's reports; is that correct?

A: I think so. I believe you. I can't always keep track as to which Surgeon General's report is which, but I know I have worked as a peer reviewer on a number of others.

Q: Based on your understanding from having worked on Surgeon General's reports and also as a practitioner in the field of smoking cessation, is it your understanding that Surgeon General's reports are intended to be read by scientists?

MR. STROUSS: Objection to the form. You can answer.

A: Let me make sure I understand.

Q: Let me try to ask it again. Is it your

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understanding that Surgeon General's reports are prepared with the idea that they will be read by scientists?

A: Yes, but not only by scientists.

Q: I was going to go through some other folks who I believe they might be also intended for. Is it also intended, the Surgeon General's report, is it intended to be read by doctors, medical practitioners?

A: Yes.

Q: Is it also the intent of the Surgeon General's committee or the people writing Surgeon General's reports that they be read by folks who work for federal and state governments?

A: Yes.

Q: Specifically, is it your understanding that people involved in public health on behalf of the State of Massachusetts read Surgeon General reports?

A: I don't know if they read them or not. I think the documents are meant to be available and understandable by the general public.

Q: Okay. Are they meant to be available and understandable as well to state government employees charged with the public health?

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A: Yes.

Q: The findings are reported in the media, are they not?

A: Yes.

Q: And the idea behind that is to make the findings of Surgeon General reports available to the general public; is that right?

MR. STROUSS: Objection to the form.

A: Yes.

(Exhibit No. 5 was marked.)

Q: Dr. Rigotti, I am handing you your expert disclosure statement in this case, which I marked as Rigotti Exhibit 5. The first question I have is, did you prepare this yourself?

A: The first draft was written by someone else.

Q: When you say "someone else," do you have any idea who?

A: I am not sure. I think it might have been Betsy McIntyre. I am not sure who wrote it, and then I was given a copy of it and asked to review it and I made some changes or edited it, to be more correct, and then I think we went back and forth a couple of times by fax, and then we agreed on this statement.

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Q: Did you save any of the drafts that went back and forth?

A: I threw everything out. I should say when I reread it, it reads a lot like things I have written by myself about myself.

[6] **Q:** Although you don't specifically know the [7] person who drafted this, is it your understanding [8] that it was written by lawyers representing the [9] Commonwealth in this case?

[10] **MR. STROUSS:** Objection.

[11] **A:** I don't know. I assume so.

[12] **Q:** The people who provided it to you, were they [13] lawyers representing the Commonwealth?

[14] **A:** Yes.

[15] **Q:** I want to ask first about the second [16] paragraph on the first page. The first sentence [17] talks about your longstanding interest in issues at [18] the intersection of behavior and medicine?

[19] **A:** Yes.

[20] **Q:** It talks about work that you have done on [21] the medical complications of eating disorders?

[22] **A:** Yes.

[23] **Q:** When did you start focusing as part of your [24] practice or part of your professional life on eating

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[1] disorders?

[2] **A:** When I was a senior resident, which would [3] have been in 1981, there was a unit on eating [4] disorders that was starting at the hospital, at [5] Mass. General Hospital, where I work, and they were [6] looking for a female internist to do medical [7] evaluations for patients who would be referred to [8] this unit, and there were not very many female [9] internists at the Mass. General Hospital at that [10] point. So I was asked to do the work. I agreed. [11] So starting in 1981 or '82 I worked for several [12] years with an eating disorder group, [13] multidisciplinary group, based in the department of [14] psychiatry.

[15] **Q:** Is your undergraduate degree in psychology?

[16] **A:** No. In human biology, which is a special [17] interdisciplinary degree that melded biology with [18] social science, meaning psychology, sociology and [19] anthropology.

[20] **Q:** Was there any reason that you were [21] interested in studying eating disorders as opposed [22] to the other focus of your practice?

[23] **A:** No. I wasn't really interested in eating [24] disorders particularly, but I became interested in

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[1] the problems that they gave — the medical problems [2] that they gave to people.

[3] **Q:** The third sentence of that second paragraph [4] talks about since 1982 your work with tobacco use, [5] including public policy issues and so forth?

[6] **A:** Yes.

[7] **Q:** What first interested you in working on [8] tobacco-related issues?

[9] **A:** When I was an intern, it really came from my [10] patients. When I was an intern I was called by a [11] patient who said she was pregnant and she was [12] smoking again, and she asked me what she should do [13] about it, and because I was her doctor and I had [14] never smoked — I had gone to medical school and [15] learned that smoking was bad for your health, but [16] not learned anything about how to change that [17] behavior or about the idea that it was maybe my [18] responsibility as a physician to know what to say to [19] this woman. So I was clueless.

[20] It seemed to me that I should know the [21] answer to this question. I asked a number of my [22] superiors, and no one else had an answer really. So [23] I looked into the matter, gave a presentation at a [24] conference where I was supposed to give a

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[1] presentation about a subject on how to quit smoking, [2] and that's how I learned. That's how I got [3] interested, and my colleagues were all amazed, and I [4] expressed what I learned, a few facts, and became an [5] expert because I was in an environment where no one [6] knew anything.

[7] **Q:** As part of that answer you told me that you [8] have never smoked?

[9] **A:** Right.

[10] **Q:** Has anyone in your immediate family ever [11] smoked?

[12] **A:** My father smoked for many years.

[13] **Q:** Is your father still with us?

[14] **A:** No. He died a few years ago. What did he [15] die of?

[16] **Q:** If you don't mind.

[17] **MR. STROUSS:** Let him ask the questions. [18] Try to limit your answers to his questions.

[19] **Q:** It's part of making life easier for the [20] court reporter. If you don't mind my asking, what [21] was the cause of your father's death?

[22] **A:** He died of lung cancer.

[23] **Q:** Okay. I want to move to the second page of [24] your expert disclosure. Under the heading

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[1] "substance of anticipated testimony," are you there [2] with me?

[3] **A:** Yes.

[4] **Q:** The first sentence reads "Dr. Rigotti will [5] testify that nicotine produces regular compulsive [6] use, that such use is persistent despite attempts to [7] quit, and that abstinence from smoking produces [8] withdrawal symptoms." Did I read that correctly?

[9] **A:** Yes.

[10] **Q:** I am going to try to parse through that [11] sentence and ask you some questions about some of [12] the statements that are in there.

[13] First of all, it talks about nicotine [14] producing regular compulsive use. Now, does that, [15] is that meant to refer to nicotine generally or [16] nicotine in cigarette smoke?

[17] **A:** It means nicotine in tobacco products.

[18] **Q:** Let me talk to you for a minute about some [19] other forms of nicotine that are available on the [20] market. Does nicotine gum in your opinion produce [21] regular compulsive use?

[22] **A:** As best we understand, there is a small [23] percentage of people who use nicotine gum in order [24] to quit smoking who become — who have difficulty

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[1] stopping using it.

[2] **Q:** When you say "small percentage," can you [3] give me an estimate?

[4] **A:** An estimate would be five percent.

[5] **Q:** Does the nicotine patch produce regular [6] compulsive use in your opinion?

[7] **A:** When used to — when used as part of a quit [8] smoking program, it has been my experience that the [9] patch does not produce regular compulsive use.

[10] **Q:** Use. Are you familiar with the patch, using [11] it for any other reason, recreationally?

[12] **A:** No.

[13] **Q:** Based on your experience and your practice, [14] it is your understanding that people don't use the [15] nicotine patch recreationally, for a nontherapeutic [16] purpose?

[17] **A:** No.

[18] **Q:** How about nicotine nasal spray. Does that [19] produce regular compulsive use?

[20] **A:** I have less direct experience with that, but [21] I have read about it in the product, the product —

[22] **Q:** The product insert?

[23] **A:** Yes. And also read about it in the [24] literature, and it is thought that it has a greater

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[1] propensity to cause regular compulsive use than [2] other nicotine products because of the rapidity with [3] which the brain —

[4] Q: When you say "it is thought," are you aware [5] of any data to support the conclusion?

[6] A: Yes. What I am referring to is in the [7] product insert. They talk about these studies that [8] were done to prove it was effective in helping [9] people quit smoking, and there is a sentence in [10] there that some — substantial numbers of people who [11] were in those studies were still using the nasal [12] spray for longer than the six months that it is [13] currently recommended for use. I interpreted that [14] to mean there was a potential for people to become [15] dependent on the use of the nasal spray.

[16] Q: Is there anything else other than what you [17] read in the product insert for nicotine nasal spray [18] that would support a conclusion, any other data?

[19] A: I don't know. There might be.

[20] Q: But you don't of any other?

[21] A: Not without looking back in my files. I [22] would have to reread the articles that have been put [23] in the medical literature. They may well say [24] something.

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[1] Q: Okay. Is it fair to say that dependence on [2] nicotine gum and the nicotine patch is rare?

[3] A: Yes.

[4] Q: With nicotine nasal spray, there is this [5] product insert you described. Other than that, as [6] you sit here today, can you point me to any other [7] data to show that it leads to dependence in the [8] user?

[9] A: No.

[10] Q: Let me ask you about the nicotine inhaler. [11] Does the nicotine inhaler produce regular compulsive [12] use?

[13] A: I don't know.

[14] Q: Are you aware of any data showing dependence [15] on a nicotine inhaler?

[16] A: No. But it is a new product. So we don't [17] yet know how it will be used when used by a large [18] number of people, not in careful controlled clinical [19] trials.

[20] Q: Okay. On the subject of clinical trials, [21] you mention toward the top of Page 2 of this [22] disclosure, the last sentence of that partial [23] paragraph says among your current research projects [24] are clinical trials of new drugs for smoking

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[1] cessation?

[2] A: Yes.

[3] Q: What drugs are referred to there?

[4] A: Our research group has done a trial [5] sponsored by Glaxo Wellcome Company looking at [6] Zyban.

[7] Q: And Zyban —

[8] A: Zyban is also known as Wellbutrin, which is [9] an anti-depressant that was recently approved by the [10] FDA for use as a smoking cessation aid.

[11] Q: What is your role in these clinical trial?

[12] A: I am the principal investigator for the [13] Massachusetts General Hospital site. It's a multi- [14] site trial. So my role has been — the trial is [15] almost over — was to conduct a study protocol that [16] was designed by investigators working with people at [17] Glaxo Wellcome to test a specific hypothesis about [18] the efficacy of the drug.

[19] Q: So your relationship that got you into this [20] clinical trial is with Glaxo Wellcome Company?

[21] A: Yes.

[22] Q: Are you doing contract research for them [23] essentially?

[24] A: Yes.

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[1] Q: Is it your understanding that the contract [2] research that you are doing for the Glaxo Wellcome [3] Company will be published?

[4] A: Yes, that is the expectation.

[5] Q: Do you have any idea when that might happen, [6] what is the timetable at this point?

[7] A: The study is almost finished and being [8] closed out. They are — there's a meeting scheduled [9] for November of the different site investigators to [10] talk about the publication plans. So I would — I [11] don't know for sure.

[12] Q: Have you been involved in any clinical [13] trials of any products that are nicotine replacement [14] products as opposed to other forms of [15] pharmacotherapy?

[16] MR. STROUSS: Objection to the form. If [17] you understand.

[18] Q: Do you understand my question?

[19] A: You are asking me —

[20] Q: Have you been involved in any clinical [21] trials of any nicotine replacement products?

[22] A: Yes. One small trial that our group did to [23] test a nicotine patch.

[24] Q: When was that?

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[1] A: It was just this past year, and it was a [2] post-marketing trial. It was not a test of [3] efficiency. It was a test to look at the question [4] of whether or not it was useful to decrease [5] gradually the nicotine patch or whether to stop it [6] abruptly, which of those two scenarios led to a [7] better cessation rate. It was a small trial.

[8] Q: What did you find in your trial?

[9] A: I don't know the answer yet.

[10] Q: Is the trial concluded?

[11] A: Yes.

[12] Q: You are still analyzing the data?

[13] A: I am not analyzing the data. The data is [14] being analyzed by a research group called Linberry [15] Research Associates, which was working for [16] SmithKline Beecham that makes the patch.

[17] Q: Do you expect to publish the results of this [18] trial?

[19] A: I hope it is published. That was the [20] expectation that I had when I did this.

[21] Q: Do you have any idea what the timetable is [22] of when that may happen?

[23] A: I don't. The data were just collected in [24] the spring of '98. These things take time.

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[1] Q: I want to ask you about abuse potential of [2] nontobacco nicotine products. Do you have any [3] understanding of what the abuse potential of any of [4] the nontobacco nicotine products is that we have [5] been discussing this morning?

[6] A: I am not sure I understand your question. [7] It sounds like what you had been asking me before [8] about — how is that different than the question you [9] were asking about compulsive regular use of these [10] different products?

[11] Q: I think it's a little different in the sense [12] that compulsive regular use might be different than [13] sort of acute abuse. In other words, people perhaps [14] not using a nicotine patch or nicotine gum every [15] day. So that there would be some sort of regular [16] sustained continuous use, but using the patch or the [17] gum or nasal spray recreationally on occasion.

[18] MR. STROUSS: I am not sure what your [19] explanation was.

[20] Q: I am going to try to ask the question a [21] different way. Are you aware of anyone, [22] Dr. Rigotti, who uses nicotine without tobacco [23] recreationally?

[24] A: No.

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[1] Q: Nicotine without tobacco is available in [2] several different forms?

[3] A: Yes.

[4] Q: There's the nicotine gum and

patch that we discussed today?

A: Yes.

Q: There is also nicotine nasal spray?

A: Yes. Although that's only available by prescription.

Q: Is it your understanding that there is a plan to make that available without prescription?

A: I am not aware of such a thing.

Q: In fact, pure nicotine can be purchased through pharmaceutical companies and used in research; isn't that right?

MR. STROUSS: Objection.

A: I don't know.

Q: Have you ever done any research using pure nicotine?

A: No.

Q: Have you done any animal-based research at all?

A: No.

Q: Let me ask a little bit about nicotine

pharmacology. Do you consider yourself an expert in pharmacology generally?

A: I am a doctor. So I've had a course in pharmacology, and I prescribe drugs. There are people who know more about pharmacology in general than I do. So I would say I am not an expert.

Q: Let's take that specifically to nicotine pharmacology. Do you consider yourself an expert in the pharmacology of nicotine?

A: Well, it's sort of a compared-to-what question. I know people in the field who are my colleagues who know more about it than I do. I know more about it than many people. I know that doesn't exactly answer your question.

MR. STROUSS: Perhaps if you can define —

THE WITNESS: What an expert is.

Q: I will ask you some specific questions and see where that takes us. Have you had any specific training, formal training, education in the area of nicotine pharmacology?

A: No.

Q: Have you published any research anywhere on the subject of nicotine pharmacology?

A: No.

Q: Have you lectured anywhere to anyone on the subject of nicotine pharmacology?

A: In the lectures I give about tobacco, I talk about what we know about nicotine pharmacology.

Q: When you say "what we know," how did you gather your knowledge?

A: By reading what other experts have written and by reading the literature like the Surgeon General's report.

Q: Fair enough. So your understanding of nicotine pharmacology is based on the research and publications of others —

A: Yes.

Q: — as opposed to your own research and publications?

A: That's true.

Q: Let me ask you about a few people and tell me if you think that these people are leading authorities in the field of nicotine pharmacology. Do you believe that Jack Henningfield is a leading authority in nicotine pharmacology?

MR. STROUSS: Objection. You can answer. I am objecting to the form of the question.

A: Yes.

Q: Do you believe John Hughes is a leading authority in the area of nicotine pharmacology?

A: Yes.

Q: Do you believe that Neil Benowitz is a leading authority in the field of nicotine pharmacology?

MR. STROUSS: Objection.

A: Yes.

Q: Are you familiar with the mechanism through which nicotine affects people?

A: Yes.

Q: How does that work?

A: Nicotine acts on the brain, on certain receptors in the brain and on certain neurotransmitters in the brain.

Q: Now, the brain, that's part of the central nervous system, correct?

A: Yes —

Q: I want to make sure I have a clear understanding.

A: — usually.

Q: Does nicotine also act on the peripheral nervous system?

A: Yes. I believe it does.

Q: Do you know what sorts of effects it has on the peripheral nervous system?

A: I learned it in pharmacology, but I am not sure I could remember. I could look it up for you.

Q: There are receptors such as acetylcholine, sometimes called nicotinic receptors, in the peripheral and central nervous system; is that right?

A: I believe that's true.

Q: Now, nicotine is not the only substance that reacts or has a receptor mechanism, is it?

A: No.

Q: In fact, a lot of what we eat and drink acts on receptors in our bodies; is that fair?

MR. STROUSS: Objection.

Q: I can be more specific.

A: Yes, be more specific.

Q: The caffeine in my can of Coca Cola —

A: As best we know it works through a receptor mechanism.

Q: Is it your understanding that milk, tryptophan in milk works through a receptor mechanism to have an effect on the user?

A: I am not sure that there's tryptophan receptors.

Q: Do you know whether the tryptophan in milk has an effect on serotonin in the brain?

A: I don't know.

Q: Do you know whether theobromine in chocolate has an effect on receptors in the brain?

A: I don't know.

Q: Are receptors or neurochemicals affected by dieting, for example? I ask you this because of your work with eating disorders.

A: I am not sure that I know the answer that question.

Q: You don't know one way or the other whether dieting causes any kind of neurochemical effects?

A: I would suspect that some kinds of dieting might.

Q: When you say "some kinds," can you be more specific?

A: Very strict diets that put people into states of ketosis, for example, might affect neurochemicals.

Q: Short of that type of an extreme diet, is it your understanding that dieting to lose weight

within a more normal range has any kind of a neurochemical effect?

A: Not that I know of, but I am not — I don't know.

[5] **Q:** It's true that receptors are affected by [6] many activities that don't involve exogenous [7] substances at all?

[8] **A:** What do you mean by "receptors"?

[9] **Q:** I am talking about receptors in the brain, [10] neurochemical activity in the brain, for example, [11] when a person feels pleasure, does that involve a [12] receptor mechanism at all?

[13] **A:** It's a hard question to answer, because I am [14] not sure our state of knowledge about what pleasure [15] represents biologically is such that we can say for [16] sure. Probably all thoughts and feelings have some [17] biological representation and probably all of them [18] reflect neurotransmitters and neurochemistry, but I [19] am not sure that we know all of that.

[20] **Q:** Okay. When you say "we know" —

[21] **A:** I know.

[22] **Q:** Does nicotine intoxicate smokers?

[23] **A:** What do you mean by "intoxicate"?

[24] **Q:** Well, let me ask you this. Do you use in

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[1] your practice the Diagnostic and Statistical Manual?

[2] **A:** Yes.

[3] **Q:** Are you familiar with the DSM IV, the fourth [4] edition?

[5] **A:** Yes.

[6] **Q:** Do you know whether according to their [7] criteria they list nicotine as an intoxicant?

[8] **A:** I don't know that. I know it is listed as a [9] drug of dependence.

[10] **Q:** Nicotine has a psychoactive effect on the [11] user; is that correct?

[12] **A:** Yes.

[13] **Q:** Would you say that intensity of the [14] psychoactive effect of nicotine is greater than or [15] less than that of heroin, for example?

[16] **MR. STROUSS:** Objection.

[17] **A:** How do you measure intensity?

[18] **Q:** Do you think that nicotine has a similar [19] effect on the user as heroin in terms of [20] psychoactive effect?

[21] **MR. STROUSS:** Objection.

[22] **A:** They are different chemicals that work in [23] different ways in the brain. So it's not that they [24] work in the same way. That's why I think I am

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[1] feeling confused about this.

[2] **Q:** What I am trying to get at is the effect of [3] that substance on behavior of the user at the time, [4] acute effects, if you will.

[5] **MR. STROUSS:** Of nicotine or —

[6] **Q:** I am asking about comparing the acute short- [7] term effects of nicotine as opposed to heroin.

[8] **A:** For someone is not tolerant to those drugs, [9] who has not been exposed to them before, I know that [10] nicotine can have a very strong effect. It makes [11] people feel sick and nauseated and other things, and [12] I think, I believe, that heroin has a very strong [13] effect, although a very different effect. So I [14] think that both of them have strong effects in [15] someone who is not tolerant to their effects, who [16] has not been previously exposed.

[17] **Q:** Let me ask about the intoxicating effect. [18] You understand that heroin intoxicates the user, [19] correct?

[20] **A:** I guess so. I am not sure what you mean by [21] "intoxicates" exactly. Can you define [22] "intoxicates"?

[23] **Q:** Is there any way of which you are aware that [24] nicotine intoxicates the user to the same extent

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[1] that heroin intoxicates the user?

[2] **MR. STROUSS:** Objection to the form as [3] it relates to intoxicating effect and use of that [4] term.

[5] **A:** When you say "intoxicates," I think of [6] alcohol. That's my understanding of the word [7] "intoxicates," that it makes people drunk.

[8] **Q:** Okay. Let's use your terminology then. [9] Would you then say that a person who has used heroin [10] and who is experiencing the psychoactive effect is [11] drunk on heroin is; that the way you would use it?

[12] **MR. STROUSS:** Objection.

[13] **A:** Yes.

[14] **Q:** So do cigarettes make people drunk the same [15] way that heroin makes people drunk in your view?

[16] **A:** I have had people describe to me their first [17] use of nicotine as very strong and overwhelming and [18] having a very strong effect on them.

[19] **Q:** Is it your testimony that the effect of [20] nicotine on the user is as intoxicating as the [21] effect of heroin?

[22] **MR. STROUSS:** Objection.

[23] **A:** I don't know that to be true.

[24] **Q:** Do you know it to be false?

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[1] **A:** I don't know.

[2] **Q:** You understand that cocaine also intoxicates [3] users, correct?

[4] **A:** Yes. In the way that we have been talking [5] about it, yes.

[6] **MR. STROUSS:** In the way that Dr. [7] Rigotti defined "intoxication"?

[8] **MR. GALE:** Yes.

[9] **Q:** Is it your understanding that cigarettes [10] intoxicate smokers the way that cocaine intoxicates [11] cocaine users?

[12] **MR. STROUSS:** Objection.

[13] **Q:** To the same level of intensity?

[14] **A:** I have trouble answering that question, [15] because people, my understanding is that people use [16] cocaine intermittently, where people use cigarettes [17] with a tolerance to nicotine and are trying to [18] maintain a nicotine level so as to prevent [19] withdrawal symptoms as opposed to someone — most [20] people don't have cocaine in their system all of the [21] time, but they use it occasionally. So that it's — [22] it gives them a psychoactive effect acutely and then [23] a withdrawal symptom.

[24] **Q:** What I am trying to get at is the acute

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[1] psychoactive effect.

[2] **A:** There is an acute psychoactive effect of [3] cocaine —

[4] **Q:** Right.

[5] **A:** — and of nicotine.

[6] **Q:** Is it your testimony that the acute [7] psychoactive effect from nicotine is as intense to [8] the user as the acute psychoactive effect from [9] cocaine?

[10] **A:** We were talking about two individuals who [11] had never been exposed to either drug, and they each [12] — one of them tried cocaine and one tried nicotine. [13] I don't know which one would feel more intoxicated.

[14] If we're talking about a smoker you [15] recruited from the general public who already had a [16] tolerance to nicotine, smoking a cigarette would not [17] have a strong effect as to someone who hadn't had [18] any cocaine. But those are not equal comparisons.

[19] **Q:** No. Because in your example the person had [20] never used cocaine before. How about a regular [21] cocaine user compared to a regular nicotine user, [22] isn't the psychoactive effect of the cocaine, the [23] acute psychoactive effect of the cocaine greater?

[24] **A:** I don't know the answer to that. I do know

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[1] that people who have been addicted to both will say [2] that it is at least as difficult if not more [3] difficult to give up cigarettes than to give up [4] cocaine or heroin.

[5] **Q:** Right. I see that little later on. I will [6] get to ask you some questions about that in a few [7] minutes.

[8] Does nicotine impair cognitive ability?

[9] **A:** No. Nicotine is generally thought to [10] enhance concentration — well, no. That's not quite [11] right. In regular smokers having a cigarette helps [12] their concentration because not having a cigarette [13] causes withdrawal which causes difficulty with [14] concentration.

[15] **Q:** Is it really known scientifically whether [16] it's the withdrawal as opposed to the positive [17] effects of nicotine on the smokers that causes the [18] concentration differences?

[19] **MR. STROUSS:** Objection to the form.

[20] **Q:** Is it your testimony that it's an [21] established to reasonable degree of scientific [22] certainty that the reason smokers report increased [23] concentration after a cigarette is because they are [24] avoiding withdrawal as opposed to any positive

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[1] effect of nicotine?

[2] **A:** Yes, I believe that that is true.

[3] **Q:** Is it fair to say that no one gets drunk [4] from cigarettes, using your terminology?

[5] **A:** I thought I said if someone hasn't used it [6] before and smoked a cigarette, that they would feel [7] the nicotine version of drunk.

[8] **Q:** Let me ask the question a different way. Is [9] it fair to say regular smokers don't get drunk from [10] cigarettes?

[11] **MR. STROUSS:** Objection.

[12] **A:** By "drunk" you mean? What do you mean by [13] "drunk"? Unable to —

[14] **Q:** I was using "intoxicated" and we weren't [15] communicating on it.

[16] **MR. STROUSS:** Do you understand the [17] question?

[18] **Q:** Let me ask the question this way. Is it [19] fair to say that smokers, regular smokers are not [20] intoxicated by cigarettes?

[21] **A:** Yes.

[22] **Q:** Does smoking result in smokers being unable [23] to comprehend warnings about smoking effects on [24] their health?

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[1] **A:** No.

[2] **Q:** Does nicotine result in smokers being unable [3] to decide whether to smoke?

[4] **A:** Well, nicotine is an addictive drug and [5] makes it difficult for people to stop smoking.

[6] **Q:** Does nicotine render smokers unable to quit?

[7] **A:** You are asking me a black-and-white [8] question. I am not sure it has a black-and-white [9] answer. It makes it more difficult for them to [10] quit. It doesn't make it impossible for some or [11] many smokers to quit, because we know that people do [12] quit smoking.

[13] **Q:** Right. I am not talking about difficulty, [14] but just inability. Has there been any group of [15] smokers identified who are rendered unable to quit [16] as a result of nicotine?

[17] **A:** I have had patients with serious tobacco- [18] related medical diseases who have been unable to [19] quit smoking and smoked until they died.

[20] **Q:** Was it that they were unable to quit or just [21] unsuccessful in their quitting attempts? Here's [22] where I am trying to go. You run a smoking [23] cessation clinic, correct?

[24] **A:** That's true.

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[1] **Q:** Do you advise smokers, any smoker that they [2] are unable to quit?

[3] **A:** No.

[4] **Q:** Is it part of your treatment philosophy in [5] dealing with your patients that any smoker if [6] properly motivated can quit smoking?

[7] **A:** If motivated and given an appropriate [8] assistance, yes. There are some times when [9] people — there are effects, psychological effects [10] of quitting smoking that can sometimes destabilize [11] people's psychological equilibrium in such ways that [12] they might better get their psychological [13] equilibrium stabilized by other drugs before they [14] quit smoking. I am not sure I was clear, but I will [15] stop.

[16] **Q:** Is it fair to say that smokers perceive [17] benefits from nicotine?

[18] **A:** Yes.

[19] **Q:** Do smokers tell you that when you treat [20] them?

[21] **A:** Smokers do. Although many smokers also say [22] they no longer get any benefit from their cigarettes [23] and are smoking only to prevent the pain of [24] withdrawal.

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[1] **Q:** Are there smokers in your practice who tell [2] you that nicotine and cigarettes help them [3] concentrate?

[4] **A:** Yes.

[5] **Q:** Have smokers told you that nicotine helps [6] improve their attention level?

[7] **A:** Yes.

[8] **Q:** Have smokers told you that nicotine in [9] cigarettes reduces their anger or improves their [10] mood in some way or another?

[11] **A:** Yes.

[12] **Q:** Now, have you also seen some of those listed [13] in the literature as —

[14] **A:** Some of those. What is "those"?

[15] **Q:** Have you seen literature that shows smokers' [16] perception that nicotine improves their [17] concentration, enhances their mood, improves their [18] attention level?

[19] **A:** Yes.

[20] **Q:** As part of your practice do you stay current [21] with the literature on smoking and health-related [22] issues?

[23] **A:** I try to.

[24] **Q:** Specifically to smoking cessation, is it

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[1] part of your job to stay current with the smoking [2] cessation literature?

[3] **A:** Yes.

[4] **Q:** Have you operated as a peer reviewer to any [5] periodicals on smoking cessation?

[6] **A:** Yes.

[7] **Q:** What peer-reviewed periodicals are those?

[8] **A:** Lots of them.

[9] **Q:** If you could give me some examples?

[10] **A:** The Annals of Internal Medicine. JAMA, The [11] Journal of the American Medical Association. I [12] think I have done some for the New England Journal [13] of Medicine. The Journal of General Internal [14] Medicine.

[15] **Q:** For how long have you been a peer reviewer [16] for these types of publications on smoking cessation [17] issues?

[18] **A:** I don't exactly remember when I started, but [19] I think it's been about a decade.

[20] **Q:** I want to ask you some questions about [21] withdrawal symptoms in abstinent smokers. You have [22] not published any original research in that area, [23] have you?

[24] **A:** No.

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[1] **Q:** Who would you consider some of the leading [2] authorities who have published original research in [3] the area of withdrawal symptoms in abstinent [4] smokers?

[5] **A:** Jack Henningfield, John Hughes, Dorothy [6] Hatsukami, Saul Schiffman.

[7] **Q:** Do you, as you define the terms, are

[8] withdrawal symptoms in abstinent smokers the same [9] thing as cravings to smoke or are those two [10] different things?

[11] **A:** That's a controversy in the field right now. [12] I believe the Surgeon General's report in 1988 spent [13] some time discussing that. The DSM IV, as I [14] understand it, says that craving is not part of the [15] current definition of nicotine withdrawal. It seems [16] craving independently contributes to the difficulty [17] that smokers have in quitting smoking, but they have [18] taken — the most recent version of the criteria for [19] nicotine withdrawal syndrome do not include craving. [20] It's in that document, but to be sure —

[21] **Q:** This Jack Henningfield article?

[22] **A:** Yes.

[23] **Q:** If you would like to look at it. It's [24] Rigotti Exhibit 3.

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[1] **A:** I know. I don't have to look it up. I [2] know.

[3] **Q:** Okay. According to DSM IV, craving to smoke [4] is something different from nicotine withdrawal, [5] right?

[6] **A:** Yes. I think people — I think that [7] scientists are trying to define better what craving [8] is and what it represents and how it relates to [9] nicotine, and as best I understand it, the final [10] answers are not in.

[11] **Q:** What's your understanding in terms of how [12] long after a person stops smoking withdrawal from [13] nicotine is present in that person, withdrawal [14] symptoms?

[15] **A:** It's difficult to give a specific time when [16] all symptoms are certainly gone in all smokers, but [17] my understanding is that the symptoms begin within a [18] few hours of the last cigarette, peak, and at two to [19] three days in many cases are gone — are largely [20] gone, but are not entirely gone after about a week [21] or two. There have been some studies that have [22] looked at the time course of withdrawal symptoms and [23] certainly after a month they are largely gone.

[24] **Q:** Is it your understanding that craving to

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[1] smoke can last longer than one month in an abstinent [2] smoker?

[3] **A:** People will talk about craving lasting [4] longer, yes. Although it is possible that craving [5] later on may represent a different phenomenon than [6] craving earlier on. I think it's a complicated [7] issue.

[8] **Q:** I believe that you've written that nicotine [9] replacement therapy can help reduce or even [10] eliminate withdrawal symptoms from nicotine; is that [11] correct?

[12] **A:** Yes.

[13] **Q:** Is nicotine replacement therapy effective in [14] reducing cravings to smoke?

[15] **A:** My understanding of what the literature says [16] is that some studies will say that it does and some [17] studies will say that it does not.

[18] **Q:** What's your opinion?

[19] **A:** I think that nicotine replacement might [20] reduce some cravings, but I don't know that it has [21] been conclusively shown to reduce cravings. I have [22] seen an abstract recently, as recently as this [23] spring, where some of the researchers whose names I [24] gave you before, have addressed these issues and

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[1] have been trying to sort this out.

[2] **Q:** Does that include John Hughes?

[3] **A:** Yes. Although I think the abstract I was [4] thinking of might have been from Saul Schiffman.

[5] **Q:** Okay. Is it your opinion that abstinent [6] smokers undergo physiological withdrawal?

[7] **A:** Yes.

[8] **Q:** I want for you to compare for me the [9] intensity of that physiological withdrawal as you [10] perceive it with some other substances. For [11] example, is the intensity of physiological [12] withdrawal from nicotine more intense or less [13] intense than withdrawal from alcohol in a person who [14] is alcohol-dependent?

[15] **A:** I am not sure I know the answer to that [16] question. It may have to do with how dependent the [17] smoker or the alcohol user were. They might be [18] similar or the alcohol might be worse.

[19] **Q:** You are aware that sometimes people who are [20] severely alcoholic are hospitalized as a result of [21] their withdrawal symptoms?

[22] **A:** Yes.

[23] **Q:** Have you ever hospitalized a smoker for [24] nicotine withdrawal?

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[1] **A:** No.

[2] **Q:** Have you ever heard of that happening [3] anywhere?

[4] **A:** No.

[5] **Q:** Withdrawal from barbiturate use can be life- [6] threatening; is that right?

[7] **A:** Yes.

[8] **Q:** A percentage of people who try to, who are [9] barbiturate-dependent who try to get off [10] barbiturates without some sort of chemical therapy [11] will die. There is a certain percentage that die; [12] is that right?

[13] **A:** Yes.

[14] **MR. STROUSS:** If you know.

[15] **A:** I am not sure. Let me be honest.

[16] **Q:** I absolutely want you to be honest and give [17] your best answer to everything.

[18] **A:** Okay.

[19] **Q:** Withdrawal from nicotine is not life- [20] threatening?

[21] **A:** It is not.

[22] **Q:** Withdrawal symptoms from heroin in a person [23] who is dependent on heroin are very severe; is that [24] correct?

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[1] **A:** Yes.

[2] **Q:** Is the physiological withdrawal from [3] nicotine more or less intense than the physiological [4] withdrawal from heroin?

[5] **A:** Less.

[6] **Q:** Do you believe that people can become [7] dependent on caffeine?

[8] **A:** I don't know if it meets all the criteria [9] for dependence as set down by the DSM IV.

[10] **Q:** Okay. Have you read any publications by [11] people whom you believe to be leading authorities in [12] the area of pharmacology?

[13] **A:** About caffeine?

[14] **Q:** In the area of caffeine, for example, have [15] you read any of Jack Henningfield's publications on [16] caffeine dependency?

[17] **A:** No.

[18] **Q:** Any of Neil Benowitz's publications on [19] caffeine dependency?

[20] **A:** No.

[21] **Q:** Have you read any of John Hughes' [22] publications on caffeine dependency?

[23] **A:** No.

[24] **Q:** Or Dorothy Hatsukami's?

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[1] **A:** No.

[2] **Q:** Would you defer to those people in terms of [3] their work and opinions as to whether or not [4] caffeine is a dependence-producing substance?

[5] **A:** "Defer" meaning?

[6] **Q:** Would you trust their judgment?

[7] **A:** Yes. I would read what they said and see if [8] I agreed with them.

[9] **Q:** Fair enough. Is severity of wi-

thdrawal [10] symptoms directly related to success in quitting [11] smoking? In other words, are people who have more [12] severe withdrawal symptoms less likely to be able to [13] quit?

[14] **A:** Yes.

[15] **Q:** Are there data and publications going in the [16] other direction? Have there been studies that have [17] shown that success in quitting in the population [18] being studied was unrelated to severity of [19] withdrawal symptoms?

[20] **A:** I think there may be. I don't know for [21] sure, but I couldn't state that every study has [22] always shown a relationship between the intensity of [23] the withdrawal and the success in quitting.

[24] **Q:** How about in your own work in your own

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[1] publications, have you published studies showing [2] that severity of withdrawal symptoms were not [3] related to success in quitting smoking?

[4] **A:** No. I haven't published anything that I [5] recall that looks specifically at measures of [6] nicotine withdrawal.

[7] **Q:** How about measures of nicotine intake by the [8] smoker before quitting?

[9] **A:** Yes. I have published — what's your [10] question?

[11] **Q:** I was going to ask it. Is the amount of [12] nicotine intake by a smoker directly related to [13] success in quitting? In other words, if you look at [14] a population, do the heavier smokers have a smaller [15] percentage chance to quit?

[16] **MR. STROUSS:** Objection. Go ahead and [17] answer it.

[18] **A:** On average people who smoke more cigarettes [19] per day are thought to be more nicotine-dependent [20] and the people who smoke more cigarettes per day in [21] many studies are less likely to succeed in quitting [22] smoking. Does that answer your question?

[23] **Q:** Yes. But there are studies that go in the [24] other direction, isn't that right, showing that

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[1] there is no relationship?

[2] **A:** I think that most studies — and I am not [3] aware of studies that go in the opposite direction. [4] I think that there may be — I can't say that every [5] study as you asked, because in medicine you can [6] never say everything is a certain way. I think [7] generally speaking daily cigarette consumption is a [8] pretty reliable predictor of success in quitting [9] smoking.

[10] **Q:** When you say "pretty reliable predictor," [11] can you compare it to some other predictors? For [12] example, self-efficacy, can you define how you would [13] use the term "self-efficacy" in your publications or [14] teaching?

[15] **A:** My understanding of self-efficacy is [16] confidence in your ability to quit. That's an [17] important predictor of success also.

[18] **Q:** In fact the literature shows that self- [19] efficiency in the smoker is probably the best [20] predictor of ability to quit; is that correct?

[21] **A:** I am not aware that that's true. It is a [22] strong predictor, but it's — I don't know that it [23] is the strongest.

[24] **Q:** Are you aware of any data or any

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[1] publications that show that any predictor is [2] stronger, is a better predictor of a smoker's [3] ability to quit than that smoker's self-efficacy?

[4] **A:** I am trying to think back to some of the [5] analyses that I've done in my own work, which since [6] they are not in front of me, I don't remember [7] exactly what had the largest odds ratio in the [8] multivariate — what you are speaking of is a [9] multivariate — what you do is look at who quits and [10] who doesn't quit. You do as your outcome measure, [11] you do a multivariate analysis, putting in a number [12] of predictor variables to see which has the large —[13] which is independent of others, and in those usually [14] self-efficacy or a measure of the confidence in the [15] ability to quit has been in many cases one of the [16] ones that has come out, but number of cigarettes per [17] day often comes out as well.

[18] What you get also depends on what you [19] put in. In other words, if you ask — not every [20] study measures every potential predictor, and so [21] it's not always possible to know which is the most [22] important. So I guess I can't say that [23] self-efficacy is the strongest. I will disagree [24] with you, I think.

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[1] **Q:** I am not sure if you are or not. Let me see [2] if I can find a question we can agree on. Is self- [3] efficiency a very important predictor and a very [4] reliable predictor —

[5] **A:** Yes.

[6] **Q:** Let me finish my question.

[7] **A:** Of quitting smoking.

[8] **Q:** Thank you. [9] (A recess was taken from 11:21 to 11:34 a.m.)

[10] (Ms. McIntyre joins the deposition.)

[11] **Q:** I want to turn our attention back to your [12] disclosure statement. In talking about nicotine [13] producing regular compulsive use, can you describe [14] what you mean by that?

[15] **A:** That people smoke daily, many cigarettes a [16] day, and they continue to smoke even when it's [17] difficult to smoke or when they are sick or when [18] they — if they run out of cigarettes they will go [19] in the snow to a convenience store and inconvenience [20] themselves to get cigarettes. That's what I mean.

[21] **Q:** Cigarettes aren't unique in that respect. [22] There are other legal substances that people will [23] inconvenience themselves to get.

[24] **A:** Can you name one?

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[1] **Q:** Sure. Ice cream.

[2] **A:** I don't think so.

[3] **MS. MCINTYRE:** You're asking the witness [4] to speculate.

[5] **Q:** Would you agree with me behaviors can be [6] compulsive even if there is no drug involved at all?

[7] **A:** Yes. There is a disorder called obsessive- [8] compulsive order.

[9] **Q:** People that have obsessive-compulsive [10] disorder behavior don't necessarily have to be [11] involved with drugs?

[12] **A:** I'm not sure I know what you mean.

[13] **Q:** Are you aware of any compulsive behaviors [14] other than drug-related behaviors?

[15] **A:** No. I don't know what you are getting at. [16] This is beyond my expertise.

[17] **Q:** Let me take a step back. You have done work [18] with eating disorders, correct?

[19] **A:** Yes.

[20] **Q:** Would a person suffering from anorexia [21] nervosa exhibiting compulsive behavior?

[22] **A:** I am confused. A person with anorexia [23] nervosa generally does not eat.

[24] **Q:** So that's a compulsive behavior in your

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[1] view?

[2] **A:** No.

[3] **Q:** How about a person with bulimia nervosa, are [4] they exhibiting a compulsive behavior?

[5] **A:** A person with bulimia who is binging and [6] purging, you could say that was compulsive.

[7] **Q:** Outside of bulimia, are you aware of any [8] other compulsive behavior that people engage in that [9] is not a drug-related behavior?

[10] MS. MCINTYRE:: I take it you are asking [11] her about compulsive in the

sense that she has used [12] it in this disclosure?

[13] **MR. GALE:** I am talking about [14] compulsive —

[15] MS. MCINTYRE:: As she —

[16] **Q:** If you have trouble understanding what I [17] mean by a question, like by the word "compulsive," [18] ask me and I will be glad to help.

[19] **A:** I am not sure what you mean by " compulsive." [20] You asked me to define it and I referred you to the [21] DSM IV. I was it using in the same way that the DSM [22] IV uses it.

[23] **Q:** Okay.

[24] **A:** So —

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[1] **Q:** Let me ask the question this way. Are you [2] aware that DSM IV identifies a number of compulsive [3] behaviors that are not drug-related behaviors?

[4] **A:** I am not a psychiatrist. So I don't know [5] about that.

[6] **Q:** Okay. Would you describe smoking as a [7] conditioned behavior?

[8] **A:** Tell me what you mean by "conditioned"?

[9] **Q:** Are you familiar with the phrase [10] "conditioned behavior" at all as part of your [11] practice?

[12] **A:** I have seen it used in different ways by [13] different people.

[14] **Q:** I am more interested in what you mean. How [15] would you define a conditioned behavior?

[16] **A:** Well, I think of it as either classical or [17] operant conditioning. That's how I understanding [18] conditioning, which is a psychological term.

[19] **Q:** All right.

[20] **A:** And there is a — part of the nature of [21] cigarette smoking is conditioned.

[22] **Q:** Okay. What part of it?

[23] **A:** What do you mean by "what part of it"? Are [24] you asking me for a percentage?

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[1] **Q:** No, ma'am. You told me that part of [2] cigarette smoking behavior is conditioned. I am [3] asking you what part of cigarette smoking is [4] conditioned?

[5] **A:** What I mean is, for example, many people at [6] the end of a meal will feel the desire for a [7] cigarette. That is thought to be a conditioned [8] behavior. When the phone rings, people who smoke [9] often light up a cigarette as well as talking on the [10] telephone. That's thought to be a behavioral [11] conditioning portion of cigarettes. Some of the [12] cigarettes that people pick up are related to that. [13] Some of them are related to needing to get their [14] nicotine levels in their brain up again.

[15] **Q:** And that will vary from smoker to smoker, [16] won't it?

[17] **A:** Yes.

[18] **Q:** In other words, some smokers will smoke for [19] these conditioning reasons that you are talking [20] about, when some smokers might smoke more for [21] nicotine?

[22] **A:** Yes.

[23] **Q:** Now, you have started to talk about some [24] reasons other than nicotine that people might smoke.

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[1] There are a number of reasons that smokers smoke, [2] that they enjoyed smoking that are not related to [3] nicotine; is that right? For example, after a meal [4] or with a cup of coffee?

[5] **A:** Yes.

[6] **Q:** Okay. Some smokers smoke as a social [7] adaptation?

[8] **MR. STROUSS:** Objection.

[9] **A:** I am not sure I know what you mean.

[10] **Q:** Some people smoke when they are with friends [11] but don't smoke when they are alone; is that fair?

[12] **A:** I am not sure that I know that to be the [13] case.

[14] **Q:** You never had a smoker tell you that?

[15] **A:** No. There are — no. There are some [16] smokers who will smoke when they go out, but it [17] doesn't mean that the other times that they don't [18] smoke, no. I think we must be misunderstanding each [19] other.

[20] **Q:** Okay. You think we are misunderstanding [21] each other. Let's go back a step to where we were. [22] I think I am getting lost here. Has a smoker ever [23] told you in your practice that they smoke when they [24] were with friends but not when they are alone?

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[1] **A:** No.

[2] **Q:** You don't know any smokers that smoke that [3] way?

[4] **A:** I don't know any smokers who only smoke when [5] they are with friends and never smoke by themselves, [6] so that every time they are with friends they are [7] smoking and every time they are not with friends [8] they are not smoking.

[9] **Q:** Not necessarily every time they are with [10] friends, but sometimes they smoke with friends but [11] they don't smoke when they are alone?

[12] **A:** I do not know smokers like that.

[13] **Q:** Have smokers told you that they like the [14] sensory effects of cigarettes, smell, taste, feeling [15] in their throat when they inhale?

[16] **A:** I know the literature tells us that those [17] are some of the things that smokers say they like [18] about cigarettes. It's not something I hear very [19] much from smokers. I hear more often that they [20] don't like the smell, the leftover smell of tobacco [21] smoke.

[22] **Q:** Okay. Are you familiar with the research [23] and the publications of Jet Rose?

[24] **A:** Yes. A little bit.

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[1] **Q:** How little? How are you familiar with his [2] work?

[3] **A:** I have read his work referred to by other [4] people. I have not read his papers directly myself.

[5] **Q:** Do you have any direct knowledge of work [6] that he's done in the area of the role of sensory [7] effects in maintaining smoking?

[8] **A:** Direct knowledge? I haven't read what he [9] has written, his words, but I have read — I have [10] read other people talking about the work he has done [11] and some — about the work he has done.

[12] **Q:** Based on what you know of Jet Rose's work, [13] do you consider him a leading authority in the field [14] of sensory effects in maintaining smoking behavior?

[15] **A:** Yes.

[16] **Q:** Do you also consider Jet Rose as a leading [17] authority in the area of the role of nicotine in [18] maintaining smoking behavior?

[19] **A:** That I don't know.

[20] **Q:** The second sentence under "substance" says [21] you will testify to most addicted smokers smoke [22] every day and have their first cigarette within a [23] half hour after they wake up. To you is there any [24] difference between the word "addicted" and the word

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[1] "dependent"?

[2] **A:** I think they refer to the same thing.

[3] **Q:** You referred several time to DSM IV. Does [4] DSM IV refer to drug addictions or drug dependence [5] or both?

[6] **A:** It uses drug dependence. I don't know if it [7] uses addiction. I don't remember whether it does or [8] not, because I didn't read it looking specifically [9] for that.

[10] **Q:** In your publications do you use the words [11] "addiction" and "dependence" interchangeably?

[12] A: Yes.

[13] Q: When you talk to smokers trying to quit, do [14] you used "addiction" and "dependance" [15] interchangeably or do you tend to use one word more [16] than the other?

[17] A: I use them both.

[18] Q: In your opinion, is using the word [19] "addiction" when talking to a smoker trying to quit, [20] is that productive or counterproductive in trying to [21] help that smoker trying to quit?

[22] MS. MCINTYRE: Objection.

[23] A: I think that it can be helpful in the sense [24] that people don't like to think of themselves as

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[1] addicts or addicted to something. So pointing out [2] to people that they are addicted or dependent on [3] nicotine can be helpful, and I think that perhaps [4] for the general public addiction has a stronger [5] connotation than dependency, but I think that [6] scientists see them as reflecting each other.

[7] Q: Your answer says you think it can be helpful [8] in a certain sense. Can it also be harmful and [9] counterproductive to label a smoker a nicotine [10] addict if you want that smoker to quit?

[11] A: If it undermines their self-efficacy, I [12] suppose it might be.

[13] Q: Have you seen that happen? Have you seen it [14] undermine a smoker's self-efficacy?

[15] A: No. I can't recall that I have.

[16] Q: I want to ask you a few questions about [17] terminology, so I understand how you would define [18] the term "addiction." I am going to ask you a [19] number of words. I am going ask if they mean the [20] same thing or something different from the word [21] "addiction."

[22] A: Is this addiction as understood by the [23] scientific community or as understood by the general [24] public, which may be different?

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[1] Q: As understood by you in forming the basis of [2] expert opinions as to whether or not nicotine is [3] addictive.

[4] A: Okay.

[5] Q: To say a substance is reinforcing, is that [6] the same thing as addictive or something different?

[7] A: It's part of being addicted. It's not — it [8] is, but not sufficient to be addicted. How is that?

[9] Q: To say something is reinforcing does not [10] mean that it is addictive?

[11] A: Yes.

[12] Q: To say something is pharmacologically [13] active, is that the same thing as being addictive?

[14] A: No.

[15] Q: If something is rewarding, does that [16] necessarily mean that it's addictive?

[17] A: No.

[18] Q: If a substance is psychoactive, does that [19] mean it's addictive?

[20] A: I don't think so.

[21] Q: If a substance is labeled a drug, does that [22] mean it is addictive?

[23] A: No.

[24] Q: To say that something has a narcotic effect,

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[1] is that the same thing as saying it is addictive?

[2] A: I am not sure I would know what "narcotic [3] effect" means.

[4] Q: To say that substance has a sedating effect [5] on the user, is that the same thing as to say it is [6] addictive?

[7] A: No.

[8] Q: To say a substance has a stimulating effect [9] on the user, is that the same thing as to say it is [10] addictive?

[11] A: No.

[12] Q: If a substance provides pleasure to the [13] user, that doesn't necessarily make it addictive, [14] correct?

[15] A: No. No.

[16] Q: No, that's not correct?

[17] A: I'm agreeing with you.

[18] Q: I asked the question poorly. If a substance [19] provides pleasure, does that necessarily make it [20] addictive?

[21] A: No.

[22] Q: How would you determine whether an [23] individual smoker was addicted?

[24] A: I would refer to the criteria in DSM IV as a

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[1] guide.

[2] Q: Would that require an individual assessment [3] of that particular smoker?

[4] A: Yes.

[5] Q: Based on your experience in this field, in [6] your opinion, what percentage of people who smoke [7] every day are addicted?

[8] A: I want to say the vast majority. You want [9] me to give you a number?

[10] Q: Your best estimate.

[11] A: Somewhere 80 to 90 percent.

[12] Q: This is under —

[13] A: Of people who smoke every day?

[14] Q: Yes, ma'am.

[15] A: Yes.

[16] Q: Based on your experience and in your opinion [17] of all smokers, what percentage of them do you [18] believe smoke every day?

[19] A: We have data on that. I have read data on [20] that.

[21] Q: Okay.

[22] A: It is — I am trying to remember. It's [23] about 90 percent or more.

[24] Q: Okay. As I put those numbers together in my

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[1] head, and tell me if I wrong, would it be your [2] opinion of all smokers somewhere between 70 and 80 [3] percent of them are addicted, whether they smoke [4] every day or not?

[5] A: I would say 80 percent are addicted.

[6] Q: The next sentence says you will testify that [7] although millions of people try to quit smoking each [8] year, less than five percent have long-term success?

[9] A: Yes.

[10] Q: That five percent, are you talking about [11] less than five percent of smokers or less than five [12] percent of those who are attempting to quit?

[13] A: Of those who are attempting to quit.

[14] (Exhibit No. 6 was marked.)

[15] Q: Dr. Rigotti, I am handing you what's been [16] marked as Rigotti Exhibit 6. It is an article that [17] you published in 1996 entitled "Cigarette smoking [18] and coronary heart disease" that appeared in the [19] periodical Cardiology Clinics. Do you recognize [20] this as being your publication?

[21] A: Yes.

[22] MR. STROUSS: Do you have extra copies?

[23] MR. GALE: I have one. A lot of the [24] exhibits that I am using are double-sided copies.

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[1] So when you make copies you probably want to note [2] that.

[3] Q: Okay. Is this an article that you published [4] in 1996?

[5] A: Yes.

[6] Q: Okay. I want you to turn if you could to [7] Page 61 and then it goes on to Page 62. It talks [8] about stages into which you can categorize former [9] and current smokers; is that right?

[10] A: Yes.

[11] Q: Then you assign some percentages to those [12] changes in terms of people who might end up being [13]

categorized that way; is that fair?

A: Yes.

Q: In paragraph number one on Page 61, it talks about precontemplation." The smoker has no interest in quitting and denies or downplays the dangers of smoking to him or herself. Population surveys reveal 35 to 40 percent of the current smokers are in this current stage."

A: Yes.

Q: Do you still agree with that?

A: Yes.

Q: So at any given point in time in any year,

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for example, 35 to 40 percent of smokers aren't even contemplating quitting; is that fair?

A: Yes.

Q: It then talks about the contemplation stage where smokers are considering quitting but ambivalent about actually quitting. It states that 35 to 40 percent of smokers are in that stage; is that right?

A: Yes.

Q: Would you agree with me a smoker in the contemplation or precontemplation stage, they are not attempting to quit at that point?

A: Yes.

Q: Then in the preparation stage on Page 61, going over to 62, you talk about that 20 to 30 percent of smokers at any point in time are in that stage. Do you still agree with that estimate?

A: Yes.

Q: Is it fair to say that at any point in time only 20 to 30 percent of smokers are actively trying, would actively try to quit?

A: Are actively trying to quit? Yes.

Q: So that in, to compare to this sentence, in your statement you say " millions of people try to

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quit smoking each year, but less than five percent have long-term success." In fact in any given year only 20 to 30 percent of smokers will even try to quit; is that fair?

A: Yes.

Q: Of course in order to quit they have to try?

A: The data tell us about 30 percent of smokers say that they attempt to quit each year.

Q: Okay. So about 30 percent attempt in any given year, meaning that 70 percent make no attempt to quit in that year?

A: Yes.

Q: Turn back if you could to Page 56. I am focused now on the paragraph in the lower left-hand column starting " Over 90 percent of current smokers know that smoking is harmful." Are you there with me?

A: Yes.

Q: At the end of that paragraph it talks about cessation rates from smoking cessation programs, and it says, "cessation rates of 30 percent at one-year followup are usual." Do you still agree that that is true?

A: Yes. That refers to people who are quitting

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with assistance.

Q: Right. In a clinic like the one you have at Massachusetts General; is that right?

A: Yes.

Q: What sort of a rate do you get at Massachusetts General?

A: In our group programs our one-year cessation rate is about 35 percent.

Q: A one-year cessation rate, would that be what you consider long-term quitting success?

A: Yes.

Q: At what point before one year if someone starts to smoke again is it short-term? In other words, what's the cutoff between long-term and short-term success in trying to quit smoking?

MR. STROUSS: Objection.

A: I don't know that — I am not sure I know the answer to that question. I think that one year is considered the minimum of long-term success, although some people might say six months. Three months would be consider short-term.

Q: Do you agree with the statement in the paragraph before that that says 90 percent of all smokers who have quit have stopped on their own?

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A: It says surveys of former smokers reveal that 90 percent stop smoking on their own. So I agree that's what smokers say in surveys — ex-smokers say in surveys.

Q: Do you agree that 90 percent of people who have quit have quit on their own?

A: I think there are many people who see that — who may have gotten assistance in the past and not recalled it or not attributed their success to some assistance that they had in the past.

Q: So you think that people underreport, people say that they quit on their own when in fact they got some sort of help that they are not telling us about?

A: Or that they don't remember.

Q: Now, you agree there are as many ex-smokers in the United States now as there are smokers?

A: I don't know the numbers exactly, but that sounds about right.

Q: Let me ask the question a different way. How about if we put it the way that you have got it written in your article?

A: You are talking about the quit ratio?

Q: Yes.

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A: Yes.

Q: In the United States half of those who have ever smoked have now quit?

A: Yes.

Q: Do you still agree that's true?

A: Approximately that's true.

Q: If I am not mistaken, the ex-smokers now surpass the smokers. Is that your understanding?

A: I am not sure.

Q: Okay. It's also true, isn't it, that success rates for individual smokers are better than the success rate for a single quit attempt? In other words, a lot of smokers quit not on their first attempt?

A: Yes.

Q: In fact, with every attempt to quit, the likelihood that they succeed will go up; isn't that right?

A: Yes.

Q: I want to compare this with your experience in treating patients with eating disorders. There's a statement that you have here talking about smokers where you compare the difficulty in quitting smoking with quitting some other addictive substances and

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say it is harder to quit smoking?

A: Which statement are you referring to?

Q: This is —

A: You are back on this (indicating)?

Q: I put the article down.

A: Okay.

Q: Do you see that statement?

A: Yes, I do.

[9] **Q:** I want to ask you something about your [10] practice and the folks you dealt with with eating [11] disorders. In your opinion is it easier for someone [12] to correct an eating disorder like anorexia or like [13] bulimia or is it easier for someone to stop smoking?

[14] **MS. MCINTYRE:** Objection. It's not [15] relevant to her disclosure. The statement isn't [16] made in there.

[17] **Q:** Let me ask the question a different way.

[18] **MR. RYAN:** The objection is relevance.

[19] **MS. MCINTYRE:** The objection is the [20] question is misleading and also not relevant to her [21] anticipated testimony, okay?

[22] **Q:** This statement here talks about smokers and [23] compares them. What's that based on?

[24] **A:** You mean what is my statement based on?

[1] **Q:** Yes, ma'am.

[2] **A:** My statement is based largely on reading the [3] literature about this.

[4] **Q:** Okay. Now, what literature are you [5] referring to specifically? Can you give me a study [6] that I can look at?

[7] **A:** There have been articles. I can't remember [8] where exactly and who wrote them. There was one in [9] JAMA in the early eighties. You probably know what [10] I am talking about.

[11] **Q:** No. If I did I would ask you about it.

[12] **A:** I don't recall exactly. I can make a guess, [13] but I can't tell you for sure, but there was a paper [14] I remember reading a number of years ago which was a [15] survey of people who had been addicted to both [16] nicotine and another drug, an illegal drug, and [17] asked them which they found more difficult to quit. [18] That's the base — those people said it was as or [19] more difficult to quit smoking as it was to quit [20] their other drug. Therefore, that's the basis of my [21] statement.

[22] **Q:** It's based on this one study?

[23] **A:** There is more than one.

[24] **Q:** Can you direct me to any study that's done

[1] this? In other words, you told there's one you kind [2] of remember. It might be from the early eighties. [3] You think it is in JAMA.

[4] **A:** Yes. I could find it for you.

[5] **Q:** That or any other study that supports this [6] point I would very much like to see, because I am [7] interested in reading them.

[8] **A:** Okay. Sounds like I have homework.

[9] **MR. GALE:** I am sure you don't want me [10] communicating directly with your witness. If it is [11] possible for you to give those, I would appreciate [12] it very much.

[13] **MS. MCINTYRE:** Sure. If she could —

[14] **A:** I can look and see.

[15] **MS. MCINTYRE:** She will look and we will [16] provide you anything she comes up with.

[17] **Q:** There is a sentence here that "the majority [18] of current smokers, including adolescents, would [19] like to quit." In your practice do you deal with [20] people who have other behaviors that they would like [21] to quit other than cigarette smoking?

[22] **A:** Yes.

[23] **Q:** For example, do you deal with patients who [24] tell you they wish they got more exercise?

[1] **A:** Yes.

[2] **Q:** Is it your experience that all those people [3] end up getting more exercise because they say they [4] wanted to?

[5] **A:** No.

[6] **Q:** Let's talk about dieting. In your practice [7] do you deal with people who are overweight?

[8] **A:** Yes.

[9] **Q:** Do any of those people tell you that they [10] would like to lose weight?

[11] **A:** Yes.

[12] **Q:** In your experience do all of those people [13] end up losing weight?

[14] **A:** No.

[15] **Q:** Do the majority of those people lose the [16] weight they want to lose?

[17] **A:** The majority do not lose the weight they [18] want to lose.

[19] **Q:** You mentioned adolescents in this sentence. [20] In your opinion is it easier or harder or about the [21] same for an adolescent to quit smoking as opposed to [22] adult?

[23] **A:** My understanding is that earlier on in the [24] process of becoming addicted to nicotine it seems to

[1] be easier to quit smoking. However, we don't have [2] any effective methods of helping adolescents quit [3] smoking yet. It's an area that's under study. So [4] the first thing I said would lead us to think that [5] it is easier for adolescents to quit than for [6] adults, because they haven't smoked as long and they [7] probably aren't as addicted or nicotine-dependent. [8] On the other hand, when they seek treatment, we are [9] more successful at getting adults to quit smoking [10] than we are at getting adolescents to quit smoking.

[11] **Q:** Because the treatment programs seem to be [12] more effective with adults than with adolescents?

[13] **A:** Yes.

[14] **Q:** You can finish your thought if you want.

[15] **A:** That's all right. That's enough.

[16] **Q:** Let me ask you a couple more questions about [17] what you might recall about this eighties JAMA [18] study. Do you remember what drugs they were talking [19] about in terms of these illegal drugs that the [20] people were addicted to?

[21] **A:** To the best of my knowledge, it was heroin [22] and cocaine. It might have also been alcohol, but I [23] am not sure.

[24] **Q:** Okay. Those are the three other drugs that

[1] you can remember?

[2] **A:** Yes.

[3] **Q:** Are you familiar with the concept of [4] comorbidity in smokers?

[5] **A:** Yes.

[6] **Q:** Could you define for us what you would mean [7] by a comorbid smoker?

[8] **A:** My understanding of comorbidity and the way [9] that I would use it refers to someone who both [10] smokes and has either another drug addiction or a [11] psychiatric disease that would make it more [12] difficult to quit smoking.

[13] **Q:** Okay. Based on — are you finished?

[14] **A:** In some contexts — what about somebody who [15] say smokes and has heart disease? Do they have a [16] comorbid condition? That's how I would think about [17] it.

[18] **Q:** When you talk about comorbidity you are [19] talking about people that abuse substances other [20] than nicotine along with smoking or people who have [21] some sort of psychiatric disorder?

[22] **A:** When I am talking about cigarette smoking, [23] yes. There are other times when speaking about [24] comorbidity.

[1] **Q:** Because you might be talking about someone [2] who has a brain tumor along with heart disease?

[3] **A:** Yes, comorbid condition.

[4] **Q:** In terms of the patients that come to your [5] smoking cessation clinic, what percentage of them [6] are comorbid in terms of their use of another [7] sub-

stance in addition to nicotine?

[8] A: I have to give you an estimate.

[9] Q: Of course.

[10] A: But to the best of my knowledge it's about [11] — speaking about someone who's currently addicted [12] or has been an addict?

[13] Q: Let's start with currently.

[14] A: Currently addicted would be small, probably [15] five percent.

[16] Q: How about has been addicted?

[17] A: Higher. We see a number of people who have [18] been addicted to alcohol, for example, or other [19] drugs, and it's probably in the 10 to 20 percent [20] range.

[21] Q: So that I understand, between 10 to 20 [22] percent of the people that come to your smoking [23] cessation program have at one point or another been [24] dependent on a substance other than cigarettes?

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[1] A: Yes. When I hear you state that, I think [2] probably 10 percent is a better estimate.

[3] Q: So about 10 percent of them?

[4] A: Yes. I would agree with that.

[5] Q: What percentage of the smokers that come [6] through your smoking cessation clinic are comorbid [7] with some other sort of psychiatric disorder?

[8] A: That would be a larger percentage; 40 to 60, [9] somewhere in that range.

[10] Q: So the 40 to 60 percent of people that are [11] enrolled in your clinic at any point in time are [12] likely to be suffering from any sort of a [13] psychiatric disorder?

[14] A: Yes. But I include in that not just serious [15] disorders like major depression, but a history of [16] depression or dysthymia, which is an intermediate [17] condition which is some depression, but not a major [18] depression.

[19] (A discussion was held off the record.) [20] (A lunch break was taken from 12:20 to 12:55 p.m.)

[21] Q: Doctor, I want to focus back if I can on [22] Page 3 of your disclosure, which I think is Rigotti [23] Exhibit 5.

[24] A: Page 3?

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[1] Q: Yes, ma'am. The paragraph that starts on [2] that page that says you will describe the [3] difficulties smokers have quitting and will explain [4] various approaches to treatment for nicotine [5] dependence. Could you give me an overview of what [6] you plan to say in that regard?

[7] A: Many people have trouble quitting smoking [8] and that a part of that is nicotine withdrawal [9] symptoms that reflect nicotine dependence; and there [10] are both behavioral and pharmacological treatments [11] to help people quit smoking, and nicotine [12] replacement products are one category of treatments.

[13] A second category is the antidepressant [14] Zyban, and when put together they work better than [15] either one alone, meaning behavioral and [16] pharmacological treatments. That's my understanding [17] of the field. That's what experts believe.

[18] Q: Okay. It's certainly what you believe?

[19] A: It's what I believe.

[20] Q: When you say that many people have [21] difficulty or have trouble quitting smoking, some [22] people quit smoking with little or no difficulty; is [23] that fair?

[24] A: Yes.

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[1] Q: That includes some people who are what might [2] be described as heavy smokers?

[3] A: It is possible, yes.

[4] MS. MCINTYRE: Objection.

[5] Q: And you say a part of the trouble in [6] quitting smoking is nicotine withdrawal symptoms. [7] So that you and I are clear, that's not the only [8] reason that people might have trouble quitting [9] smoking; is that right?

[10] A: No.

[11] Q: No, it is not the only reason?

[12] A: No, it is not the only reason.

[13] Q: We talked about some of the reasons that [14] people like to smoke outside of nicotine this [15] morning. I won't replow that ground.

[16] Let me ask you a little bit about some [17] of the treatment approaches. In your smoking [18] cessation group, do you use any kind of group [19] technique or group therapy?

[20] A: Yes.

[21] Q: How does that work?

[22] A: We run a group program that meets weekly for [23] eight sessions for an hour and a half each. During [24] that time the people go through the process of

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[1] preparing to quit and setting a quit date and [2] actually quitting and working on maintaining their [3] abstinence.

[4] Q: After that eight-week period, does your [5] smoking cessation clinic recommend that people [6] continue in long-term group therapy to discuss their [7] smoking issues?

[8] A: We don't offer that, but we do offer — we [9] offer the availability of our nurses by telephone [10] for people that are having trouble, because we [11] understand that quitting smoking is a process that [12] takes a period of time.

[13] Q: Right. Is it also your understanding that [14] changing dependent behavior with other drugs is also [15] a process that takes a period of time?

[16] A: Yes.

[17] Q: You're familiar with the model used by [18] Alcoholics Anonymous that relies heavily on group [19] therapy?

[20] A: Yes.

[21] Q: That's group therapy that is long-term in [22] nature, as I understand it. Is that your [23] understanding too?

[24] A: Yes.

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[1] Q: Is it true that smoking cessation tends to [2] rely on long-term group therapy much less than the [3] Alcoholics Anonymous model?

[4] A: Most group — yes.

[5] Q: Why is that? Is there a place in your [6] opinion for long-term group therapy with smokers?

[7] A: Yes. There are some smokers who need [8] long-term help, but not all of them do.

[9] Q: Why do you believe that it hasn't caught on [10] with people trying to quit smoking as it has with [11] alcoholics trying to quit alcohol?

[12] A: There is a Smokers Anonymous equivalent to [13] Alcoholics Anonymous. There is such a group that is [14] available, without a clear fixed ending program. I [15] think the reason that Alcoholics Anonymous or that [16] people using the Alcoholics Anonymous model stay in [17] it for longer periods of time is that for many [18] people the process of alcohol addiction has been [19] more damaging to their entire lives, more than just [20] to their health.

[21] Most of the problems with nicotine, with [22] tobacco are medical problems. But with the use of [23] alcohol people often have trouble with their job, [24] with their relationships and with the law. Because

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[1] I think the nature of alcohol addiction is more of a [2] problem for the alcoholic in those other realms, [3] those folks need more long-term help. That's how I [4] understand it.

[5] Q: Okay. Why do you understand it is that [6] alcohol tends to affect people's nonmedical lives [7] more than nicotine does?

[8] A: Yes.

[9] Q: Why?

[10] A: Why?

[11] Q: Yes.

[12] A: Some of it is historical in the role of [13] alcohol. It's more acceptable to — it used to be [14] more acceptable to smoke everywhere, where it was [15] not acceptable to drink everywhere. Some of it is [16] the nature of the drug itself. It's a sedative. [17] It's largely sedative. So that it also impairs [18] coordination and judgment.

[19] Q: Nicotine does not impair coordination or [20] judgment; is that correct?

[21] A: No, it does not.

[22] Q: I was trying draw a contrast.

[23] A: Yes, I agree with you.

[24] Q: Based on your overview and also your

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[1] writing, some of which we will talk about in a [2] moment, you discussed both a pharmacologic model, if [3] you will, and a behavioral model to treating smokers [4] who like to quit; is that correct?

[5] A: Yes.

[6] Q: In your opinion does a pharmacologic model [7] work effectively if not combined with behavioral [8] therapy?

[9] A: That's an area where there's some discussion [10] at this time. The success rates of a smoking [11] cessation programs that use pharmacotherapy are [12] higher if you add behavioral treatment. There is [13] one study that — there is at least one study that [14] shows that just handing out nicotine gum does not [15] help people quit smoking. There are a couple of [16] others that have shown that giving pharmacotherapy [17] with very little else can still show some affect.

[18] Q: When you say "some effect" —

[19] A: Better than a placebo. The quits rates are [20] much lower, probably more in the five to ten percent [21] — five percent to ten percent as opposed to, say, [22] 20 versus 35.

[23] Q: And the 20 versus 35 percent is for people [24] who also have behavioral therapy?

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[1] A: Yes.

[2] Q: What in your opinion, how much do quit rates [3] improve between behavioral therapy with no nicotine [4] replacement and behavioral therapy with nicotine [5] replacement?

[6] A: The guidelines for smoking cessation [7] treatment from the agency for healthcare policy and [8] research tell us as well as do several meta-analyses [9] that you approximately double the success of a quit [10] attempt by adding nicotine replacement as opposed to [11] a placebo.

[12] Q: Double it from what to what?

[13] A: You double it from what it would have been [14] with — you look confused.

[15] Q: Let me try to ask the question this way. [16] Maybe it will help. In your publications going back [17] 10, almost 15 years, you have discussed quit rates, [18] as in the one article we looked at this morning, [19] from a smoking cessation program being in the 30 [20] percent range, that being a usual range; is that [21] right?

[22] A: Yes.

[23] Q: That 30 percent number, does that represent [24] behavioral therapy only or behavioral therapy plus

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[1] nicotine replacement?

[2] A: It reflects a combination of the two. My [3] belief is that behavioral treatment alone would [4] usually produce quit rates of about 25 or so [5] percent, and that if you add nicotine replacement, [6] you can approximately double that.

[7] Q: Has that been your experience in your clinic [8] that half of the people who have both behavioral [9] therapy and nicotine replacement are successful in [10] quitting smoking?

[11] A: That is higher than we would have, but the [12] studies — and I would say our experience is that [13] you can get maybe 40 to 45 percent to quit, which is [14] nearly half. It's much higher. It's not quite a [15] doubling but nearly a doubling. Many of the studies [16] have shown 20 percent quit rate with behavioral [17] treatment alone and 40 percent quit rate with [18] nicotine replacement.

[19] Q: Let's talk about the experience that you [20] have had in your smoking cessation clinic. Without [21] nicotine replacement therapy, behavioral therapy [22] only, what sort of a quit rate can you anticipate in [23] your program?

[24] A: I've never broken down the statistics that

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[1] way. So I can't tell you.

[2] Q: Can you give me any idea at all?

[3] A: I would expect that we will get the national [4] average for state of art programs which would be 25 [5] to 30 percent at one year.

[6] Q: That would be for any given quit attempt; is [7] that right?

[8] A: Yes. For a single quit attempt.

[9] Q: What has been the quit rate experienced by [10] your program when behavioral therapy is combined [11] with nicotine replacement therapy?

[12] A: Again, I haven't broken it down that way. [13] So I can't tell you the specifics. Our experience [14] reflects the national — what the literature says [15] which is it is closer to 40 percent.

[16] Q: So we are talking about a difference of [17] between 25 and 30 percent without nicotine [18] replacement and 40 percent with nicotine [19] replacement?

[20] A: Let's say 40 to 45 percent. Something in [21] that range. It's giving us a delta of about 20 [22] percent, if I subtracted correctly in my head.

[23] Q: It actually would be a delta of 15 percent [24] if you look at 25 to 30, 40 to 45.

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[1] A: Okay.

[2] Q: But it is close. Have you started to do, [3] have you seen any data yet from your Zyban trials to [4] see what the quit rates are?

[5] A: I have seen a presentation from the company [6] whose put together all of the data, but I can't, I [7] am not at liberty to discuss it.

[8] Q: Fair enough. Is it your understanding that [9] that data will become published and be published at [10] some point?

[11] A: Yes. Yes, it will for sure.

[12] Q: Did I ask about quit rates using nicotine [13] replacement therapy with no behavior therapy?

[14] A: I think you did.

[15] Q: You said like five to ten percent or did you [16] say something else?

[17] A: I don't know. We could look back in the [18] record and see.

[19] Q: Or I could ask you. At your clinic do you [20] have any smokers that you just give nicotine [21] replacement therapy to with no behavior counseling?

[22] A: No.

[23] Q: You wouldn't be able to tell me what the [24] experience of your clinic is in terms of just

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[1] pharmacologic model with no behavior?

[2] A: That's correct.

[3] Q: From your practice generally you know that [4] patients don't always follow physician advice in a [5] lot of areas; is that fair?

[6] MR. STROUSS: Objection.

[7] A: Yes, that is true.

[8] Q: Do you treat any diabetics?

[9] A: Yes.

[10] Q: Is it your experience that all diabetics [11] follow the diet and medicine regimens that are [12] prescribed?

[13] MR. STROUSS: Objection. That is a [14] little beyond the scope here.

[15] MR. GALE: I don't think it is. I am [16] going ask the question, unless you instruct her not [17] to answer.

[18] MR. STROUSS: No.

[19] A: Yes, they don't all follow the instructions.

[20] Q: In your experience what percentage of [21] diabetics follow rigidly the dietary and medical [22] therapies that are prescribed to them?

[23] A: I am not sure I can answer that question [24] because the — what I ask of diabetics is different.

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[1] I don't ask them the same thing. It's not like [2] quitting smoking. There is more of a spectrum. So [3] it is harder to know, and also you are asking me a [4] combination of diet and medication. Those are [5] different things. People follow different things to [6] different amounts.

[7] Q: Let's break them out then. What's your [8] experience in terms of diabetics following your [9] advice in term of their dietary restrictions, what [10] percentage of them follow the advice?

[11] A: What I ask a diabetic to do if they [12] overweight is to lose weight. What percent lose [13] weight? I don't know. I would have to guess.

[14] Q: What is your best estimate?

[15] MS. MCINTYRE: I don't want the witness [16] to guess.

[17] Q: Is it less than 50 percent?

[18] MS. MCINTYRE: If you have to guess, [19] don't answer. I don't think anyone here wants you [20] to guess. But if you know —

[21] A: I am guessing. I don't know.

[22] Q: You can't give me any estimate at all?

[23] A: No.

[24] Q: Your statement talks about describing the

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[1] difficulty that smokers have quitting. Is it your [2] understanding that it's been common knowledge for at [3] least decades that it can be hard to stop smoking [4] once one starts?

[5] MR. STROUSS: Objection to the form.

[6] A: I am not sure I know how to answer that [7] question. How many decades are you talking about.

[8] Q: Let me just talk your own personal [9] experience. Before you went to medical school and [10] became a doctor, did you have an understanding that [11] it could be tough for people to stop smoking?

[12] A: I don't know that I knew that. I knew that [13] smoking was bad for people because that became [14] public knowledge — the fact that smoking could [15] cause lung cancer became well publicized in 1964.

[16] Q: And you remember that?

[17] A: I was old enough to remember it, but I don't [18] remember knowing anything about the process of [19] quitting smoking. I think that when I went to [20] medical school I thought people that continued to [21] smoke were just stupid and stubborn. I don't think [22] I understood anything about what it was like to [23] smoke or why people had trouble quitting. It might [24] have been somebody's knowledge, but it wasn't my.

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[1] Q: Have you as part of your professional work [2] or for any reason done any investigation of the [3] historical scientific literature to see how far back [4] there were publications that talked about difficulty [5] people had quitting smoking?

[6] A: I have not done that research. I know that [7] some of the Surgeon General's reports contain some [8] of that information. I have colleagues who study [9] the history of smoking and tobacco control, but it [10] is not an area of my expertise.

[11] Q: Okay. So is it fair to say what you know [12] about smoking cessation, tobacco control is [13] basically what you have learned as you have been in [14] practice as opposed to going back before that to [15] learn what had happened in the past?

[16] A: Yes. I learned — I would say I know what [17] the field has known since the mid-seventies, which [18] was shortly before I got involved. I focussed — I [19] am not so much interested in the history when people [20] knew things such as what is the best way to help [21] people now.

[22] Q: Would you agree that from the period that [23] you have been following the literature and the [24] practice of medicine, that persuading smokers to

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[1] quit has been one of the primary public health [2] initiatives in the United States?

[3] A: Public health initiatives? What do you mean [4] by "initiatives"? Goals?

[5] Q: Goals. There has been a lot of work done [6] toward it. There has probably been more work done [7] more on that than any other public initiatives?

[8] MR. STROUSS: Are you asking about goals [9] or are you asking about initiatives?

[10] MR. GALE: I asked about initiatives and [11] then she asked me about goals.

[12] A: Let me tell you what I believe that's [13] related to this, which is that I believe, that [14] getting people to quit smoking has been one of the [15] major public health goals since we discovered how [16] harmful cigarettes were and since I have been in [17] practice. The funding for this has never matched [18] the funding for other behavioral problems, but —

[19] Q: Such as?

[20] A: HIV.

[21] Q: Any others come to mind?

[22] A: That's the main one that I think of. I [23] don't know about the funding for, say, alcohol or [24] other things.

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[1] Q: Now, since 1964 when the work, since the [2] Surgeon General's report came out, smoking rates [3] have declined substantially in the general [4] population; isn't that right?

[5] A: Yes.

[6] Q: Okay. Is that due mostly to people not [7] starting or to more people quitting?

[8] A: It's due largely to quitting.

[9] Q: When you say "largely," would you say that [10] people quitting are more responsible for the [11] reduction of quitting rate or people not starting?

[12] A: Most of the reduction is due to people [13] quitting, not to people not starting to smoke, [14] because initiation rates have not changed very much.

[15] Q: In other words, roughly the same number of [16] people start to smoke as started to smoke back [17] before the '64 Surgeon General's report?

[18] A: More or less.

[19] Q: I want to talk to you a little bit about [20] these, the behavioral model as opposed to [21] pharmacological model.

[22] (Exhibit No. 7 was marked.)

[23] Q: I am handing you what's been marked as [24] Rigotti Exhibit —

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[1] MR. GALE: Could we go off the record? [2] (A discussion was held off the record.)

[3] Q: Dr. Rigotti, I am handing you what's now I [4] believe a complete copy of Rigotti Exhibit 7. It is [5] an article that you wrote that was published in [6]

Primary Care Medicine in 1995. It's entitled [7] "smoking cessation." Do you recognize this as being [8] your work?

[9] **A:** Yes.

[10] **Q:** Okay. I would like you to turn to Page 301, [11] if you could, under the heading of "why people [12] smoke." The first paragraph says, "Smoking is a [13] complex behavior initiated and maintained for [14] different reasons." Do you still agree that that is [15] true?

[16] **A:** Yes.

[17] **Q:** "Once the smoking habit is established, it [18] is sustained by many factors."

[19] **A:** Yes.

[20] **Q:** Do you still believe that to be true?

[21] **A:** Yes.

[22] **Q:** In the next three paragraphs you describe [23] the psychological model and pharmacologic model to [24] explain continued smoking behavior?

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[1] **A:** Yes.

[2] **Q:** The last paragraph says that "the [3] pharmacologic model can explain difficulties with [4] cessation but cannot explain why smokers have [5] difficulty remaining abstinent after the first few [6] days or weeks. In fact, the major'ty of smokers who [7] stop temporarily resume smoking within a few [8] months." Do you still believe everything in that [9] paragraph to be true?

[10] **A:** I think that — let me just read this. [11] I believe possibly I would take "days" [12] out and leave "weeks." Yes, but otherwise I agree.

[13] **Q:** So the behavioral treatment model as I [14] understand it involves things like monitoring [15] cigarette intake, identifies cues to smoking, [16] changing habits to break the association between the [17] trigger and the smoking; is that all correct?

[18] **A:** Yes.

[19] **Q:** Now, in your disclosure statement you talk [20] about tobacco advertising and promotions [21] representing triggers and temptations for smokers [22] that increase relapse. Do you see where I am?

[23] **A:** No.

[24] **Q:** It's on Page 3, the bottom of the page. It

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[1] starts with "she will explain" —

[2] **A:** Oh, yes.

[3] **Q:** Do you have any background in advertising at [4] all?

[5] **A:** No.

[6] **Q:** Have you ever put together an ad campaign?

[7] **A:** No.

[8] **Q:** Your primary evaluation of advertising is as [9] a consumer; is that right?

[10] **A:** Yes. And also when I edited the Surgeon [11] General's report, I read carefully the section on [12] the effect of advertising on smoking.

[13] **Q:** Okay. So this statement in your disclosure, [14] is that based on this section of the Surgeon [15] General's report that you read?

[16] **A:** Yes.

[17] **Q:** Is it based on anything else?

[18] **A:** There have been studies published since that [19] time which would reinforce the conclusion, but yes. [20] So it would be that plus the new knowledge that has [21] come out in the last ten years.

[22] **Q:** This new knowledge was published by people [23] other than yourself; is that fair?

[24] **A:** Yes, I didn't do this work.

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[1] **Q:** Have you ever published anything on [2] advertising —

[3] **A:** No.

[4] **Q:** — specifically on how tobacco advertising [5] serves as a trigger to smokers?

[6] **A:** No. I have had smokers tell me that it [7] serves as a trigger.

[8] **Q:** Are you in your professional capacity [9] opposed to all cigarette advertising or just to [10] some?

[11] **A:** I think that the most effective — what [12] would be the best for the public health is to put a [13] ban on tobacco advertising and promotion.

[14] **Q:** So do you consider yourself a public health [15] advocate?

[16] **A:** I consider myself a public health expert and [17] researcher, more than an advocate. I see myself [18] more as a scientist than an advocate.

[19] **Q:** Okay. In your professional judgment should [20] all tobacco advertising be banned?

[21] **A:** Yes.

[22] **Q:** Are there any other legal products that you [23] believe as a public health scientist should not be [24] advertised at all?

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[1] **A:** No.

[2] **Q:** So for example ads —

[3] **A:** I am not an expert on substances, other [4] substances.

[5] **Q:** Okay. Do you consider yourself an expert on [6] cigarette advertising?

[7] **A:** I consider myself an expert on smoking [8] cessation and smoking behavior. We've already gone [9] over I haven't done the primary work on tobacco [10] advertising.

[11] **Q:** So do you consider yourself an expert on [12] tobacco advertising or —

[13] **MS. MCINTYRE:** Asked and answered.

[14] **A:** Well, again that's a compared-to-what [15] question. There are people who know more than I do, [16] but I know more than a lot of other people. It [17] depends on what threshold you consider — what you [18] consider an expert. Maybe you should define [19] "expert" for me.

[20] **Q:** I am asking you in your definition do you [21] consider yourself an expert in cigarette [22] advertising? That's what I am most interested in.

[23] **MS. MCINTYRE:** Maybe I missed what [24] aspect of cigarette advertising. She told you she's

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[1] never created an advertising campaign. She is not [2] in advertising. Could you maybe explain?

[3] **Q:** I am asking for your opinion. Do you [4] believe that you are an expert in cigarette [5] advisement?

[6] **MS. MCINTYRE:** Okay objection.

[7] **A:** No.

[8] **Q:** Now, with nicotine gum and nicotine patches, [9] although they provide nicotine to the smoker, they [10] provide it at a different rate than cigarette [11] smoking; is that correct?

[12] **A:** Yes.

[13] **Q:** How important is that in terms of the [14] ability of a smoker to quit?

[15] **A:** I am not sure I understand your question. [16] What's "that"?

[17] **Q:** Do the difference in rate of absorption from [18] gum and a patch as opposed to smoking, do those [19] differences have any impact on their effectiveness [20] as nicotine replacement therapy?

[21] **A:** Yes.

[22] **Q:** How?

[23] **A:** The goal of nicotine replacement therapy is [24] to block the pain of nicotine withdrawal, not

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[1] necessarily reproduce whatever pleasures might be in [2] smoking. Presumably the rapid rise in venous [3] nicotine levels and even more rapid rise in arterial [4] nicotine levels that you get from inhaling tobacco [5] smoke is a much more effective way of getting a hit, [6] the psychoactive effects of nicotine. The nicotine [7] gums gives a much lower

absolute level and a much [8] more gradual rise and the nicotine patches are very [9] gradual. Therefore, it does not reproduce the [10] sudden exposure of the brain to the nicotine which [11] gives the hit or the pleasure of smoking.

[12] **Q:** Okay.

[13] **A:** We know from other drugs the best way to [14] provide the best direct hit is to inhale the drug.

[15] **Q:** That's not the only way. Cocaine when [16] sniffed is addictive, correct?

[17] **A:** Yes.

[18] **Q:** And heroin when —

[19] **A:** Yes. But crack cocaine is much more [20] powerful for that reason.

[21] **Q:** But cocaine is addictive and heroin is [22] addictive when sniffed, correct?

[23] **A:** Yes.

[24] **Q:** Nicotine nasal spray, is nicotine nasal

[1] spray addictive?

[2] **A:** We went over this this morning. There are [3] some people who have difficulty quitting, difficulty [4] tapering off the nasal spray. So it may have a [5] greater potential for causing dependency than the [6] other nicotine replacement products that you have [7] referred to.

[8] **Q:** Is it preferable to the addictive potential [9] of sniffed cocaine or sniffed heroin?

[10] **A:** I don't know that I can really make that [11] judgment. I don't have any scientific data to [12] compare.

[13] **Q:** You mentioned in an earlier answer that [14] nicotine replacement therapy is not meant to replace [15] the pleasures of smoking; is that right?

[16] **A:** Yes.

[17] **Q:** One of those pleasures as you described it [18] was the rapid rate of nicotine absorption and [19] delivery of nicotine to the brain?

[20] **A:** Yes.

[21] **Q:** Is that the only pleasure of smoking in your [22] understanding or are there other pleasing aspects of [23] smoking to a smoker?

[24] **A:** There could be other pleasing aspects, but I

[1] think that is probably the most important one.

[2] **Q:** Could you turn to Page 4 of your disclosure, [3] please? The first full paragraph there talks about [4] availability of cessation programs being skewed [5] toward higher socioeconomic groups. Do you see [6] where I am?

[7] **A:** Yes.

[8] **Q:** Could you explain what you mean there?

[9] **A:** What I mean is that smoking cessation [10] programs generally cost money, and therefore, are [11] more available to people who have money to spend on [12] them.

[13] **Q:** In your experience, do most insurers, [14] private insurers pay for smoking cessation therapy [15] for their insureds?

[16] **A:** There is a wide range within the insurance, [17] different insurance plans. Many of them will pay [18] for prescription drugs for smoking cessation. They [19] are less likely to pay for the behavioral treatment [20] of smoking.

[21] **Q:** In your practice, in the clinic that you [22] run, roughly what percentage of the patients are [23] reimbursed by their insurance companies for the [24] costs incurred to go to your clinic?

[1] **A:** Most of the people in our clinic — I have [2] to give you a complicated answer. Most of the [3] people pay their own way. We offer discounts to [4] people who have certain kinds of insurance plans. [5] So a ten percent discount for people who have [6] certain kinds of insurance plans.

[7] **Q:** What kinds of insurance plans are those?

[8] **A:** I might be wrong about this, but such as the [9] HMO Blue, which is the managed care product for Blue [10] Cross. I think we do something similar for Harvard [11] Pilgrim. But we also know that people who are not [12] — who either have Medicaid or no insurance don't [13] have much access to smoking cessation services. So [14] what we have is a program through our hospital [15] that's funded by the hospital that offers the [16] availability of treatment, including nicotine [17] replacement products for free, for people who are on [18] Medicaid or on hospital free care, which is a [19] category of people who meet certain criteria at the [20] hospital, meaning they are uninsured and they are [21] poor.

[22] **Q:** What percentage of the people coming through [23] your program come through for free under this sort [24] of program you just described for me, your best

[1] estimate?

[2] **A:** I would say it's about a third, maybe.

[3] **Q:** Do those people, the people who come through [4] for free, like Medicaid recipients, do they [5] experience roughly the same quit rates as the people [6] who pay? Is there any difference that you have [7] noticed?

[8] **A:** The cessation rates for that program are [9] somewhat lower than they are for the self-paying [10] people.

[11] **Q:** Why do you think that is?

[12] **A:** Because there is a higher proportion of [13] people who are on Medicaid who have comorbid [14] problems, as I have described them. Meaning either [15] concurrent psychiatric diagnoses or other substance [16] abuse problems, and we know that group of people —[17] doesn't matter if they are on Medicaid or something [18] else — they are not going to do as well. I know, I [19] know from the literature that not only we but others [20] have the same experience. The quit rates are lower.

[21] **Q:** When you say "lower," how much different is [22] it?

[23] **A:** Sometimes half as high. So that, for [24] example, instead of 25 percent, it might be 12 and a

[1] half percent.

[2] **Q:** And that difference you attribute to the [3] comorbidity in that population?

[4] **A:** Much of it is the comorbidity. Some of it [5] also might be the fact that people who are poor have [6] more complicated lives, and it may be more difficult [7] for them to make behavioral changes, but I think a [8] good bit of it is the comorbidity.

[9] **Q:** Do you know whether the Department of [10] Medical Assistance in Massachusetts will pay for any [11] smoking cessation programs for Medicaid recipients?

[12] **A:** I can give my understanding, which may or [13] may not be correct. I don't think that they pay for [14] — I don't believe they cover nicotine replacement, [15] which is why we pay for it through our hospital. [16] They may or may not be covering Zyban or Wellbutrin. [17] It is new, so I am not sure the final decision has [18] been made about that. I don't know whether they [19] cover for smoking cessation counseling, but I was [20] under the impression that they did not at the [21] moment.

[22] **Q:** When you say at the moment, do you know of [23] any time that they ever did cover any smoking [24] cessation therapies —

[1] **A:** I am not aware that they ever did cover [2] nicotine replacement, even when it was prescription, [3] although I could be wrong about that.

[4] **Q:** Have you ever talked to anybody about that [5] topic, whether the state —

[6] **A:** My staff has looked into what is covered and [7] not covered by different plans, including the [8] Medicaid plans, at different times, so when people [9] called us asking for help, we could inform them [10] correctly. We have usually told them people on [11] Medicaid don't have any coverage. That was our [12] understanding.

[13] **Q:** In your opinion as a woman who runs a [14] smoking cessation clinic, do you believe that those [15] costs should be covered by the Division of Medical [16] Assistance for Medicaid recipients?

[17] **A:** Yes.

[18] **Q:** Why?

[19] **A:** Because smoking cessation treatment is [20] effective and people who are poor don't have other [21] access to the treatment, that's why.

[22] **Q:** Okay. If hypothetically the state had [23] determined that it would not pay for nicotine [24] replacement therapy because the state thought it was

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[1] not effective enough, would you agree with that [2] judgment or disagree with that judgment?

[3] **MR. STROUSS:** Objection. Calls for [4] speculation.

[5] **THE WITNESS:** Am I supposed to answer [6] this?

[7] **A:** I would disagree with it, but I have no idea [8] why the state made whatever decision they made.

[9] **Q:** If hypothetically the state would cover [10] hypnosis for people to stop smoking, but would not [11] cover nicotine replacement therapy, would you agree [12] with that judgment?

[13] **A:** I think that would be a mistake.

[14] **Q:** Okay. Why?

[15] **A:** I think we have better evidence for the [16] efficacy of nicotine replacement for smoking [17] cessation than we do that hypnosis is effective for [18] smoking cessation.

[19] **Q:** Do you have any understanding of the [20] relative cost of hypnosis for smoking cessation as [21] opposed to nicotine replacement?

[22] **A:** Hypnosis could cost a lot or a little [23] depending on whether it is in a group program and [24] who's doing it, and nicotine replacement can be a

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[1] lot or a little. It's usually not a little, but it [2] can be a lot or even more depending on how long you [3] use it for.

[4] **Q:** How much does nicotine replacement costs to [5] the smoker compared to the cost of buying [6] cigarettes?

[7] **A:** My understanding currently is that the [8] nicotine patch cost about $4 a day and a pack of [9] cigarettes costs about $2 a day. So it's about a [10] two- pack day.

[11] **Q:** Nicotine gum has been on the market since [12] approximately 1984?

[13] **A:** Yes.

[14] **Q:** When did you start to use nicotine gum in [15] the smoking cessation clinic that you run?

[16] **A:** We didn't start our clinic until I believe [17] 1993. '92/'93 is when we began the specific clinic [18] at Mass. General. So we have been using it ever [19] since it started and also the patch. The patch was [20] available at that time as well.

[21] **Q:** Since your clinic opened in '93 you have [22] used both the patch and gum?

[23] **A:** Yes.

[24] **Q:** In your private practice as a primary care

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[1] physician, when did you start to prescribe nicotine [2] gum to your patients who wanted to stop smoking?

[3] **A:** As best I can recall, as soon as it was [4] available in 1994.

[5] **Q:** Why did you start using it right away?

[6] **A:** Because we needed something that could help [7] people quit smoking, and we knew that the success [8] rates of just behavioral treatment were not great, [9] plus the fact that many smokers are not interested [10] in going to behavioral programs.

[11] **Q:** When the patch came out, how long had the [12] patch been out and available for you to prescribe to [13] your patients?

[14] **A:** The patch was approved in 1992.

[15] **Q:** How long after it was out did you start [16] prescribing it to your patients?

[17] **A:** As soon as it was available.

[18] **Q:** Why was that?

[19] **A:** Because I thought it was a better treatment [20] — because it was a good treatment, and I thought in [21] many cases it was better than the gum, because a lot [22] of people had difficulty using the gum correctly or [23] using it at all, because if you — if you don't have [24] your own teeth or you can't chew, you can't — for

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[1] many people it's just the compliance is much better [2] with the patch than with the gum, which probably [3] explains why it seems to work somewhat better in [4] practice.

[5] **Q:** Have you been able to prescribe nicotine [6] nasal spray to any of the people in your clinic?

[7] **A:** We could. I don't believe that we have [8] simply, because we haven't felt that we needed to to [9] this point.

[10] **Q:** Because the existing therapies you believe [11] are adequate to get the job done?

[12] **A:** We tend to combine nicotine replacement. [13] Zyban, if we are going to go in combination as [14] opposed to prescribing the nasal spray with another [15] kind of nicotine replacement, which is how I would [16] use it otherwise. I wouldn't use it alone.

[17] **Q:** Why not?

[18] **A:** Because of nicotine dependence potential. I [19] would prefer to use the nicotine patch as the base [20] and to supplement that, which is what we do in our [21] clinic. If people are having urges that are [22] breaking through, we usually use the gum and find [23] that most people find that is adequate. We haven't [24] had to go to nicotine nasal spray. We are now using

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[1] the inhaler, which is also available now in that [2] capacity, and I have recommended and prescribed it [3] to several people.

[4] **Q:** So you have prescribed the inhaler but you [5] have not prescribed the nasal spray?

[6] **A:** The other problem with the nasal spray, when [7] you read the information from the company and see [8] the video that they have produced, it's kind of a [9] nasty product in terms of side effects. It causes a [10] lot of sneezing and discomfort. Nicotine sprayed up [11] the nose is quite irritating to nasal mucosa. It's [12] appropriate for some very heavily addicted people, [13] but it's got its place in the spectrum of the [14] nicotine replacement therapy. The inhaler has a [15] greater potential.

[16] **Q:** How long has the inhaler been available for [17] prescription?

[18] **A:** It was approved over a year ago. It came on [19] the market in the summer and then direct consumer [20] advertising started in the fall. So it is very new.

[21] **Q:** So how long have you been prescribing it in [22] your clinic?

[23] **A:** Just since the summer. I think I have [24] written two prescriptions.

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[1] **Q:** Okay. Is it fair to say that [2] pharmacotherapy in helping people quit smoking has [3] evolved since 1980?

[4] **A:** Yes.

[5] **Q:** Has it gotten better?

[6] A: Yes. Has it got better? What do you mean [7] by "better"?

[8] Q: Has it gotten more effective?

[9] A: I guess when I say it has gotten better, I [10] mean there are more options, because treatment is [11] never one size fits all. So it's easier to tailor [12] it to what people need.

[13] Q: Is it more effective since, compared to the [14] mid eighties?

[15] A: Yes. In the mid eighties we had nicotine [16] gum. We know that nicotine patches according to [17] APCR, which I am sure you are familiar with, the [18] patch seems be more effective than the gum in [19] practice, and now that we are using combinations and [20] combine it with Zyban, I would expect that our rates [21] will be higher. There are not a lot of studies [22] combining — there isn't a published study combining [23] Zyban and nicotine replacement, for example.

[24] Q: But focus just on the nicotine replacement

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[1] itself. There are a number of studies —

[2] A: Yes, patch and gum.

[3] Q: I wasn't even talking about combining. I am [4] talking about studies that have talked about the [5] efficacy of nicotine replacement, whether by itself [6] or in conjunction with some sort of behavioral [7] therapy?

[8] A: Yes.

[9] Q: If you could skip down to the next paragraph [10] on your disclosure. It talks about how you will [11] describe how pharmacotherapy of smoking cessation [12] has evolved and that particularly how the benefit [13] has not been available to disadvantaged populations. [14] What do you plan to say about that? Is it anything [15] different than what we just talked about in the last [16] three questions here?

[17] A: I don't think so.

[18] Q: Okay. Anything in addition that we haven't [19] covered? I am trying to make sure I have an [20] opportunity to ask all your opinions.

[21] A: I think that's what I meant. I know what I [22] meant. Yes. I think we have covered what I would [23] say.

[24] (A recess was taken from 1:49 to 1:54 p.m.)

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[1] Q: We talked a little bit earlier today about [2] whether self-efficacy is an accurate predictor in [3] smoking cessation success. What are some other [4] things that you consider to be accurate predictors [5] of whether or not a person will successfully quit [6] smoking?

[7] A: Motivation to quit. Degree of nicotine [8] dependence.

[9] Q: Measured how?

[10] A: Well, traditionally there's the Fagerstrom [11] scale or the two questions of numbers of cigarettes [12] smoked per day and whether or not the first [13] cigarette is within the first half hour of [14] awakening.

[15] Q: Are those the two most important factors in [16] predicting —

[17] A: I am agreeing that self-efficacy is also [18] important. That's three. Those are important.

[19] Q: The next paragraph of your disclosure talks [20] about adolescent smoking and the results of research [21] that you yourself have done.

[22] (Exhibit No. 8 was marked.)

[23] Q: Let me hand you what I have marked as [24] Rigotti Exhibit 8. Is that your article that is

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[1] cited in your disclosure statement at Page 5?

[2] A: Yes.

[3] Q: Okay. What were the conclusions of this [4] study that you published in 1997?

[5] A: That enforcing age of sale laws for tobacco [6] did not reduce — reduced illegal sales to minors, [7] but cannot reduce young people's report of how easy [8] it was to get cigarettes, and it did not reduce [9] their smoking behavior.

[10] Q: My understanding from reading this is that [11] particular result surprised you; is that fair?

[12] A: I don't know if "surprised" is the right [13] word.

[14] Q: Was it the result that you had anticipated [15] going into the study?

[16] A: Well, I didn't know what the answer was [17] going to be, because if I did I wouldn't have to do [18] the study. I had hoped that these programs would [19] show that they were effective and was sorry that [20] they weren't, but the truth is always more [21] important.

[22] Q: So that I am sure I understand, the idea [23] here was that you picked out six communities in [24] Greater Boston; is that correct?

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[1] A: Yes.

[2] Q: In three of those communities enforcement of [3] age restrictions on cigarette sales to under 18 were [4] enforced more rigorously than in the other three; is [5] that fair?

[6] A: That's correct.

[7] Q: And what you found in the cities with more [8] rigorous enforcement of the age restrictions, less [9] merchants violated the law but no less children [10] smoked?

[11] A: Yes. Less merchants violated the law in the [12] test situation we gave them.

[13] Q: Your statement says that you provide results [14] of your own research, and then it says you will [15] explain how various industry-sponsored programs have [16] failed and what can be done to reduce youth smoking [17] rates. Let me take the second of those first. What [18] can be done to reduce youth smoking rates?

[19] A: The best evidence suggests that raising the [20] price of tobacco products would be a very effective [21] way to reduce youth smoking. We have the best [22] evidence to support that.

[23] Q: So by making cigarettes cost more less [24] children will smoke, in theory?

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[1] A: Fewer children will smoke and the number of [2] cigarettes smoked per person will be less and that's [3] done by raising excise taxes.

[4] Q: So your proposal then would be to raise the [5] taxes on cigarettes?

[6] A: Yes.

[7] Q: Are there any other measures that you think [8] would be effective in keeping youth from smoking?

[9] A: I think that restricting tobacco advertising [10] and promotion would also be effective, either [11] restricting and/or banning and/or providing better [12] funding for effective counter-advertising.

[13] Q: We talked about cigarette advertising a [14] little while ago. Effective counter-advertising, [15] how would you suggest that that funding, where would [16] the money come from?

[17] A: The money to pay for putting tobacco ads on [18] the air is what's expensive, not producing them. In [19] this state, as you know, we have funded it through [20] some of the revenue generated by an increase in [21] tobacco excise taxes. So a further increase in [22] those taxes could be used, and it would be a very [23] rational use, to support counter-advertising.

[24] Q: Is that something that you would advocate,

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[1] raising cigarette exercise taxes in order to pay for [2] counter-advertising?

[3] A: I would recommend raising cigarette excise [4] taxes for the direct benefit of reducing youth [5] smoking and using some of that money for counter- [6] advertising as well as for

treating smoking and [7] preventing smoking more directly, in other ways. [8] Preventing smoking in other ways and treating [9] smoking.

[10] **Q:** As the cost of cigarettes goes up, less [11] adults might also smoke or adults might smoke less, [12] correct?

[13] **A:** Wait a minute. I missed that question.

[14] **Q:** We have been talking so far about raising [15] excise taxes?

[16] **A:** Yes.

[17] **Q:** In order to reduce the number of children [18] that smoke?

[19] **A:** Yes.

[20] **Q:** Do you also believe that raising the excise [21] taxes would reduce the number of adults who smoke or [22] the amount smoked by adults?

[23] **A:** Yes. The evidence says that it will.

[24] **Q:** Would you recommend then that excise taxes

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[1] are raised so that less adults smoke and those who [2] do smoke less?

[3] **A:** Yes.

[4] **Q:** Is there anything else other than raising [5] excise taxes, changes in the way cigarettes are [6] advertised, and counter-advertising that you would [7] suggest to reduce youth smoking?

[8] **A:** I think that local programs that include a [9] focus on restricting youth access but are broader [10] than that, that mobilize the community to care about [11] youth tobacco use and perhaps teach parents how to [12] talk to their kids about cigarettes, especially [13] teach smokers how to talk to their kids about [14] smoking and other kinds of community programs could [15] also be effective.

[16] **Q:** When you say "community programs," are you [17] talking basically about educating the public or are [18] you talking about something different?

[19] **A:** I am talking more about mobilizing the [20] public to get active about an issue such as [21] preventing youth smoking that they care about. [22] There are some published studies that show some [23] changes in youth smoking rates are associated with a [24] more comprehensive program than the pure enforcement

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[1] that is described in this article.

[2] **Q:** And they would include what? The more [3] comprehensive programs would include what in [4] addition to what is described in that article?

[5] **A:** In one article they had a — one program [6] paid for a community organizer who went around to [7] different towns to help mobilize coalitions of [8] citizens to change local ordinances and educate [9] merchants about not selling to kids and doing [10] programs like that. It was a broader kind of [11] raising the issue in the community and getting [12] people to do things. It was more than just law [13] enforcement, which is what we are looking at in this [14] article specifically.

[15] **Q:** It also says here you will explain how [16] various industry-sponsored programs have failed. [17] Which programs are you referring to?

[18] **A:** What I am referring to specifically there is [19] — it's the law program which — what we know — [20] it's the law program by two different studies that [21] were published in the American Journal of Public [22] Health. It was not shown that they were effective [23] in reducing sales to minors, tobacco sales to [24] minors.

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[1] **Q:** Who published those studies?

[2] **A:** Who wrote them?

[3] **Q:** Researchers or authors.

[4] **A:** I think they were both done by Joe DiFranza.

[5] **Q:** Do you remember when they were published?

[6] **A:** I believe one in '92 and one in '96 in the [7] American Journal of Public Health.

[8] **Q:** Do you recall what his conclusions were as [9] to why the program failed in his view?

[10] **A:** I am not sure that he speculated as to why. [11] He was just documenting that the merchants that were [12] part of the program didn't have better success rates [13] in not selling to the kids than the merchants not [14] part of the program. I don't remember — I remember [15] the results of the paper. I don't remember if he [16] gave his opinion as to why it didn't work.

[17] **Q:** Do you have an opinion as to why it didn't [18] work?

[19] **A:** I think that merchant education and pure [20] merchant education doesn't work. There is evidence [21] that that is true. That's one explanation and it's [22] a good one.

[23] **Q:** Okay. Is there any other explanation that [24] you plan to offer at trial as to why that program or

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[1] any other tobacco industry program has failed to [2] keep tobacco from youth?

[3] **A:** No. I am hesitating only because I know [4] that there are some advocates that think the [5] industry isn't serious about these programs, that [6] they are just window dressing. I don't have any [7] direct evidence one way or the other. I think the [8] point is they don't work.

[9] **Q:** Just so I am clear, I want to make sure I [10] understand what your testimony is going to be before [11] I find out at trial. Do you plan to testify at [12] trial that these industry programs are somehow not [13] genuine or as you put it, window dressing?

[14] **A:** Not as far as I know.

[15] **Q:** Do you hold that opinion now?

[16] **A:** Yes.

[17] **Q:** You do hold that opinion that?

[18] **A:** No — oh, do I hold that opinion that they [19] are window dressing?

[20] **Q:** Yes.

[21] **A:** I think a little bit, yes. But can I prove [22] it?

[23] **Q:** Right.

[24] **A:** I don't think I could prove it.

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[1] **Q:** Do you have any data or evidence that you [2] can point to to show that industry programs like [3] It's The Law, which is trying to keep tobacco from [4] youth, are not genuine and are not an attempt by the [5] industry to keep tobacco from youth?

[6] **MS. MCINTYRE:** You asked her and I think [7] she responded, but go ahead. You can answer again.

[8] **A:** I don't have any proof of that, no.

[9] **Q:** What more if anything do you believe the [10] tobacco industry should do to keep tobacco from [11] youth? I might be able to ask the question a better [12] way.

[13] **A:** Okay.

[14] **Q:** If you were to work for a tobacco company [15] and they were to ask you "How best do we keep our [16] product, cigarettes, from kids under 18?" What [17] would you tell them to do?

[18] **A:** It's so hypothetical. I mean if I worked [19] for a tobacco company I'd probably say, "You should [20] stop making your product." But so it is hard to [21] answer that question.

[22] **Q:** Let me ask it a different way. If a tobacco [23] company were to come to you for advice as to how to [24] keep tobacco from youth, what would you advise them

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[1] to do?

[2] **A:** I guess I would suggest that they do some of [3] the things that I suggested before, which would be [4] to stop advertising and promoting their products, [5] especially in venues where kids are likely to see [6] them. I would tell

them to stop — to not sell the [7] products through vending machines. I would probably [8] say if they were serious about it, that they should [9] sell their products in a way that's more similar to [10] the way we handle alcohol, not that kids don't get [11] alcohol as well, but there be a small number of [12] licensed vendors. You have to show ID, and it's not [13] so easily available to buy tobacco through so many [14] different locations. I think if they put those [15] restrictions on the sales that would be helpful. [16] That's the supply side.

[17] Demand would be the advertising and [18] promotion, I guess. I suppose I could raise my [19] prices. I don't know what it would do my profits. [20] I'm not a business person. It might be good for me. [21] I don't know. I am speculating here, though.

[22] **Q:** Come back to your study for a moment, which [23] is Rigotti 8. How did you verify if at all kids' [24] access to tobacco and tobacco use?

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[1] **A:** What we did was anonymous high school [2] surveys so that students in high school grades nine [3] to twelve in the towns involved filled out a survey [4] one day in a year. That's how we measured access [5] and behavior. We asked kids if they ever smoked. [6] How many cigarettes they smoked. If they used [7] smokeless tobacco, how many tins they would use over [8] a period. We asked them if they tried to buy [9] cigarettes from a store or vending machine, and if [10] so, how often they were refused.

[11] **Q:** Did you do anything else to try to verify [12] the responses that you got?

[13] **A:** No. We took their words at face value.

[14] **Q:** The next paragraph says that " prevalence, [15] content and growth in smoking restrictions and [16] factors associated with their passage, including [17] tobacco industry opposition" — do you see where I [18] am?

[19] **A:** Yes.

[20] **Q:** Could you tell me in overview what your [21] opinions are with regard to the prevalence, content [22] and growth of smoking restrictions and factors [23] associated with their passage?

[24] **A:** Yes. Smoking restrictions in public places

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[1] and the workplace began in the early — began to [2] become common in the early eighties and have spread [3] largely through local ordinances and also through [4] the workplace, voluntary restrictions on smoking at [5] the workplace, put on by employers. There is some [6] action at the state level, although that has not [7] been as strong as what happened at the local level [8] and happened voluntarily.

[9] The article referred to here is one [10] thing we looked at was what towns had passed laws. [11] You may have that — I looked at the size of towns, [12] where they were located in the country and whether [13] or not they were from what we called tobacco- [14] producing states, which were states largely in the [15] Southeast that are major tobacco producers. We saw [16] that there was an a relationship between being — we [17] saw that the states that were tobacco producers were [18] less likely to have these no-smoking ordinances [19] passed.

[20] **Q:** Okay. Is that what you are talking about [21] when you say "including tobacco industry opposition"[22] or are you talking about something more?

[23] **A:** That's my understanding of what I meant by [24] — yes, I think that's what I mean.

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[1] **Q:** Let me ask —

[2] **A:** That's what I mean. I think that's what the [3] statement means, and since I read it and wrote it a [4] while ago, that's what I mean.

[5] **Q:** That would be reflective of the testimony [6] that you plan to give at trial in terms of tobacco [7] industry opposition to smoking bans?

[8] **A:** Maybe the honest truth is I am not sure what [9] people are going to ask me about.

[10] **Q:** That's fair.

[11] **A:** I mean a lot about the movement and what [12] brought about these bans and what some of the [13] tactics of the tobacco industry are to fight them, [14] if somebody asked me questions about that.

[15] **Q:** How about if I asked you some questions [16] about it now.

[17] **A:** Okay.

[18] **Q:** When you say "the movement," what movement [19] are you talking about?

[20] **A:** I guess what some people call the [21] nonsmokers' rights movement, which got started in [22] the early eighties and consists of people who were [23] trying to pass laws banning smoking in public places [24] and workplaces.

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[1] **Q:** Do you consider yourself and your [2] professional activities in any part to contribute to [3] that movement?

[4] **A:** I hope that the work I have done helps to [5] document — helps to evaluate it. My professional [6] role is to evaluate what people are doing in order [7] to determine what public health strategies are [8] effective and what are ineffective. So I see myself [9] as more of an evaluator of tactics and someone who [10] might think about what might be an effective [11] approach. I am not so much someone who is down on [12] the street doing it.

[13] **Q:** You say something that is an effective [14] approach. Effective in what sense?

[15] **A:** The goal — the overall goal is to reduce [16] the disease and death caused by tobacco use, and the [17] best way to do that is to reduce the proportion of [18] people who smoke.

[19] **Q:** Okay. Is that a goal of yours in your [20] professional work, to reduce the number of people [21] who smoke?

[22] **A:** Yes. My goal is to reduce the harms of [23] tobacco and somewhat to cut down on the number of [24] people who smoke and also to cut down on nonsmokers'

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[1] exposure to tobacco smoke.

[2] **Q:** Is one way that you go about advancing that [3] goal is to become involved with no-smoking policies [4] and evaluating no-smoking policies to evaluate which [5] are the most effective to get less people to smoke [6] and get less nonsmokers exposed to passive smoke?

[7] **A:** Yes. I have been interested — when you say [8] "no-smoking policies," you mean smoking restrictions [9] in public places?

[10] **Q:** Yes.

[11] **A:** The goal of those policies is not to get [12] people to stop smoking. The goal is to protect the [13] air that everybody breathes, including nonsmokers.

[14] **Q:** It's also true, though, that there is an [15] ancillary effect, which is smokers might smoke less [16] if there are less places for them smoke?

[17] **A:** That is true. The data suggests that daily [18] smoking consumption falls.

[19] **Q:** In your opinion, is that a positive thing?

[20] **A:** I think I see it as sort of a positive side [21] effect. It's not the goal, but it's not a bad thing [22] that happens.

[23] **Q:** Okay.

[24] **A:** Many smokers actually would like not to be

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[1] smokers. So many of them see it as kind of a [2] positive side effect too.

[3] **Q:** We started down this road a few questions [4] ago and you said you had

knowledge of the nonsmokers [5] rights movement and also tobacco industry tactics in [6] dealing with that movement. Have I characterized [7] what you said fairly?

[8] **A:** Yes.

[9] **Q:** First of all, how did you gain an [10] understanding of these tobacco industry tactics that [11] you are talking about?

[12] **A:** By reading journals like the American [13] Journal of Public Health and other professional [14] peer-reviewed journals that contain articles talking [15] about these things.

[16] **Q:** Have you ever had any direct dealings or [17] contact with any representative of any tobacco [18] company talking about smoking restriction policies [19] or anything like that?

[20] **A:** To my knowledge, no.

[21] **Q:** Is it fair to say that your knowledge of [22] these tactics is secondhand? You have picked it up [23] from things that you read and what people have told [24] you?

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[1] **A:** Yes. But in many cases they have been [2] pretty well documented. There is a paper trail and [3] that's how they have been written about.

[4] **Q:** Give me example of some of these tactics [5] with a paper trail?

[6] **A:** Okay. Let me think. One of the tactics [7] that has been used by the tobacco lobbyists and [8] industry is to pass weak ordinances, weak no-smoking [9] ordinances, which preempt stronger local action. [10] The reason that is done is because it's much more [11] difficult for — it has been much more difficult for [12] the industry to defeat ordinances at the local level [13] than at the state level. That is an example of what [14] I would talk about.

[15] **Q:** Have you yourself have been involved with [16] the passage of any state ordinance which you think [17] was somehow fouled by the tobacco company?

[18] **A:** No. I know — we haven't had any of those [19] pass in Massachusetts. I believe that — I can't [20] remember whether or not one has been entered — [21] what's the right word — has been proposed, but it [22] hasn't passed in Massachusetts. So it hasn't been [23] an issue. I have testified at the local level [24] supporting an ordinance and it passed.

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[1] **Q:** Would that be the Cambridge —

[2] **A:** Yes.

[3] **Q:** — ordinance that was passed in the late [4] eighties?

[5] **A:** Yes.

[6] **Q:** Other than the Cambridge no-smoking [7] ordinance or smoking-restriction ordinance that came [8] into effect in the late 1980s, have you been [9] directly involved in the passage of any other [10] smoking-restriction ordinances?

[11] **A:** No.

[12] **Q:** And the knowledge that you have of the [13] passage of ordinances around the country comes from [14] things that you have read and people you have talked [15] to; is that fair?

[16] **A:** Yes.

[17] **Q:** You have studied and published in the past [18] on the effect of smoking restrictions in the [19] workplace on quit rates —

[20] **A:** Oh, yes.

[21] **Q:** — of workers there; is that right?

[22] **A:** Yes, I think so. I think I know what you [23] are referring to, which is the paper about the New [24] England Telephone experience.

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[1] (Exhibit No. 9 was marked.)

[2] **Q:** Yes. That is the one. It is now marked as [3] Rigotti Exhibit 9. This is a paper you published in [4] the American Journal of Public Health in 1991; is [5] that correct?

[6] **A:** Yes.

[7] **Q:** If you could turn to Page 203, please. The [8] first paragraph under " discussion," "a major finding [9] of this study was the overall quit rate of 21 [10] percent over 20 months which is markedly higher than [11] the expected population quit rate of two to five [12] percent per year."

[13] **A:** I see that.

[14] **Q:** Okay. Is this the sort of the good side [15] effect that you were talking about before in terms [16] of restriction policies having people smoke less?

[17] **A:** Yes.

[18] **Q:** In your view, in your professional opinion, [19] it's a positive thing?

[20] **A:** Yes.

[21] (Exhibit No. 10 was marked.)

[22] **Q:** I hand you what has been marked as Rigotti [23] Exhibit 10. It's an article by yourself and Michael [24] Bierer that was published in 1992 in Medical Clinics

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[1] of North America. It's entitled "Public policy for [2] the control of tobacco-related disease." Do you [3] recognize this as your work?

[4] **A:** Yes.

[5] **Q:** On Page 517 there is a graph that shows [6] smoking rates or adult per capita consumption of [7] cigarettes over time and compares that to certain [8] events that happen in the public; is that a fair [9] characterization?

[10] **A:** Yes.

[11] **Q:** I note there's an entry that says [12] " nonsmokers' rights movement begins." It shows a [13] decline. I am trying to figure out how you pick a [14] start date for that?

[15] **A:** I think it was done arbitrarily. That [16] figure as it says there is from the Surgeon [17] General's report in 1989 and was actually put [18] together by — I am trying to remember who put it [19] together. I didn't actually generate the figure. [20] So it is difficult to put an exact date. It would [21] be possible to move the arrow one way or the other a [22] little bit, because movements don't usually start [23] discretely. They gradually build up.

[24] **Q:** Is it a fair reading of this chart that

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[1] when, at certain points in time when there were [2] public health initiatives against cigarette smoking, [3] that cigarette consumption tended to decline?

[4] **A:** Yes.

[5] **Q:** In fact, is that the point of this chart [6] being in here?

[7] **A:** Yes.

[8] **Q:** Let me take your attention down to the [9] bottom of that same page, 517. It talks about [10] tobacco control policies and they group them into [11] different policy types, and it talks about efforts [12] to inform or persuade being one category, economic [13] incentive is another, direct restraints on tobacco [14] use. Down at the bottom of that paragraph, it [15] reads, "Recent efforts to establish the legal [16] liability of tobacco manufacturers for the hazards [17] of their products, the so-called tobacco product [18] liability suits, are included in this category [19] because proponents have argued that the lawsuits if [20] successful will affect cigarette use via economic [21] means." Do you see that?

[22] **A:** Yes.

[23] **Q:** First of all, do you understand this suit to [24] be a tobacco product liability suit or something

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[1] else?

[2] **MS. MCINTYRE:** Objection. The witness [3] is not a legal expert. I will give you a little [4] leeway on this and then I am going to cut you off. [5] I am not going to let her answer.

[6] **A:** I don't know. I think this is different, a [7] little different than the kind of suit being [8] referred to here, because the Attorney General suit [9] is a little

different, from my understanding, but I am not a lawyer.

Q: Let me ask you this question. Do you in your professional judgment, someone working in the field of smoking cessation, support lawsuits again the tobacco industry on economic means?

A: What do you mean?

Q: On an economic basis?

MR. STROUSS: Objection to the form.

A: That's not what — the point of this statement is not to say that it is done for money. It is saying that the effect that it will have — the way in which it is helpful for tobacco control is because it will lead probably to higher prices. That was the assumption. That's a consequence of a successful suit should it occur, but the reason for

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the suit is different.

Q: Let me ask the question a different way. That's actually where I was trying to go. Do you believe it's a good thing if cigarettes end up costing more because tobacco companies lose lawsuits in your professional judgment?

A: I don't think it is a bad thing.

Q: But do you think it is a good thing?

A: Yes.

Q: Dr. Rigotti, in your professional judgment would a ban on all tobacco sales be a positive thing for public health?

A: No.

Q: Why not?

A: It's my belief and also the consensus of the public health community it would have more of a negative effective than positive effect.

Q: Why?

A: Because it would make into criminals a lot of people who are smokers who are essentially addicted to nicotine and became addicted to the substance when it was a legal product. No one in the tobacco control field believes we should make tobacco use illegal.

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Q: Okay. Does that mean that you don't advocate what some people have called a smoke-free society?

A: A smoke-free society? The term is usually referred to mean one in which the air is smoke-free that people breathe. I think it doesn't necessarily mean there are no smokers and no cigarettes, but they are not smoking in public places. They aren't smoking at work, and there probably are not so many of them.

Q: I have some questions to ask about the company documents. The way I am going to do it is I have copies when your disclosure that was given to us, it included attached to it copies of most of the documents that are referred to there, not all of them. There is one at least my colleague wants to talk to you about, but most of them I have got copies sitting over here of. I will grab those and

A: Can I use these?

Q: Of course. This is my only copy. If you will excuse me as I point across the table. I noticed when I looking at these that they are highlighted?

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A: Right.

Q: Did you do that?

A: No.

Q: Do you know who did?

A: No. I think that probably someone at Anne Ritter's office did it or someone at the Attorney General's office. Maybe Anne. They were given to me that way. The idea that — as you can see, it is quite thick, and I think they were trying to help me focus on the things they thought were most important, because I couldn't read all of them at least in preparation for today.

Q: That's fair. Let me ask you a couple of questions then. These are all the tobacco company documents that you have seen; is that right?

A: Yes.

Q: They were all provided to you by lawyers of the Commonwealth?

A: Yes. Does lawyers of the Commonwealth include —

Q: Anne Ritter.

A: Yes. Fine.

Q: When they gave them to you for the first time, they were highlighted like this?

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A: Yes.

Q: Have you ever, even today as you sit here to be deposed, have you read all of them page by page?

A: No. I have read the parts that they have marked, and I have read beyond the parts that they marked because several of them looked so interesting, and I figured that I certainly would read them, but I haven't read them all.

Q: Let me ask you —

A: I also —

Q: Please go ahead.

A: The other knowledge I have of what the documents are is what's been in the newspapers.

Q: That's fair. Did you know that a number of the company documents are available on-line now?

A: Yes.

Q: Have you gone on-line and tried to read any of them?

A: Not yet.

Q: Do you intend to do at some point?

A: I am sure I will.

Q: Do you intend to do that before you testify at this trial?

A: I haven't really thought about it one way or

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the other. I might.

Q: Okay. At this point in time do you intend to give opinions at trial about any tobacco company documents other than the ones that are sitting in the notebook?

A: That's not my intention. My understanding is these are the ones I would be asked about.

Q: When these documents were first given to you, it was Anne Ritter that gave them to you?

MS. MCINTYRE: Well, we are not going to have a long discussion. Some of these issues will be work product issues. She is not going to testify to conversations she had the Commonwealth's counsel.

MR. GALE: I will ask the questions. If you want to instruct her not to answer, fine.

MS. MCINTYRE: Let's go through it quickly. This is not something we want to waste a lot of time on.

MR. GALE: I have my six hours of testimony.

MS. MCINTYRE: Let's go.

MR. GALE: Good.

Q: When you first got these documents had you asked Anne Ritter to send you documents?

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MS. MCINTYRE: Objection. I am going to instruct her not to answer.

Q: Did you first raise the issue of you reviewing company documents or did Anne Ritter?

MS. MCINTYRE: Again, I am not going to let her testify to conversations she had with the Commonwealth's counsel, okay?

MR. GALE: Why?

MS. MCINTYRE: These are work product issues. Frankly, it's not approp-

riate for you to ask her about them.

MR. GALE: I want to make sure it is a clear record. I won't ask 15 questions if you tell me clearly any question I ask her that asks for discussions between her and a lawyer for the Commonwealth you will instruct her not to answer.

MS. MCINTYRE: If you ask what she and Anne Ritter had for lunch, if you really want to know, I will let her answer that.

MR. GALE: Let me ask a question I think will cover it.

Q: Have you had any discussions with any lawyer for the Commonwealth regarding the content of these documents?

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MS. MCINTYRE: You may answer yes or no.

A: Yes.

Q: As near as you can recall, what did you say and what did they say?

MS. MCINTYRE: I will instruct her not to answer.

Q: Okay. How much time have you spent looking at these documents?

A: A few hours.

Q: I'm sorry?

A: A few hours.

Q: A few? Roughly how many?

A: Three.

Q: When did you do that?

A: When I first got them a little bit and then yesterday and today.

Q: Before your disclosure?

MR. GALE: To put a time on it, we got disclosure statements from the Commonwealth when, do you know?

MR. STROUSS: Are you asking me?

MR. GALE: Yes.

MR. STROUSS: I don't know.

MR. RYAN: I know when ours were due.

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MS. MCINTYRE: Can I ask for a brief recess? Can we have a quick break?

MR. GALE: You bet.

MR. STROUSS: Thanks. (A recess was taken from 2:40 to 2:45 p.m.)

MR. STROUSS: I think you asked us when our disclosures were due, and my best recollection is that they were due on June 15th, except for the disclosures regarding our damages experts.

MR. GALE: Thank you. I appreciate that. We were discussing that in the hall and came to about the same date.

Q: How much time, Dr. Rigotti, did you spend before the middle of June 1998 reviewing these company documents that you have seen?

A: I don't know.

Q: When did you first receive the company documents? Was it before the middle of June?

A: No.

Q: When did you get them?

A: Well, let me actually clarify that. I think Anne Ritter sent me a box of things to read that included some of the company documents as well as copies of I think maybe some of the trial stuff from

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other trials, but I was busy. So I never read it.

Q: Fair enough.

A: So it was provided to me if I had chosen to read it. I got this booklet a few weeks ago.

Q: When you say "a few weeks ago," was that after the middle of June?

A: Yes.

Q: Do you know whether the documents that are in this booklet were part of the box of materials you got from Anne Ritter or not?

A: That was my understand.

Q: Your understanding is they were in that box or a part of it?

A: I don't know for sure, but I assumed that that's what they had done is taken out the most relevant parts of that, but again that's my assumption.

Q: How much time have you spent looking at the box and the contents of that box that Anne Ritter sent to you?

A: I haven't looked at it.

Q: Have you even cracked it open?

A: I did open it to see what was in, to see if there was anything that looked like I had to do

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anything. I assumed at some point someone would tell me what I had to do.

Q: Did anyone ever tell you?

MR. STROUSS: Objection.

MS. MCINTYRE: Objection. You may answer yes or no, but you are not to reveal the substance of any conversations that you had with the Commonwealth's lawyers.

MR. STROUSS: Had you finished your question?

A: Maybe you should repeat your question. I think I lost it there.

Q: Okay. Did anyone ever tell you that you should look at the documents in the box?

MS. MCINTYRE: Again —

MR. GALE: Let me go back. Her previous answer was "I assumed at some point someone would tell me what I had to do."

Q: So I am asking did anyone ever tell you look in the box?

MS. MCINTYRE: To the extent it reflects conversations with counsel for the Commonwealth, I instruct you not to answer.

THE WITNESS: I don't know how else I

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could answer.

MR. RYAN: Can I interject at this point? Are you asserting the attorney-client privilege?

MR. STROUSS: Work product.

MS. MCINTYRE: There are work product issues. This is something we all talk about at every deposition. So this is nothing new, but I am not going to let her testify to the substance of conversations that she has had with the Commonwealth's lawyers.

MR. RYAN: Just so I am clear, and tell me if I am not stating your objection correctly, you are asserting the work product privilege with respect to discussions between the Commonwealth's attorney and a disclosed trial expert.

MS. MCINTYRE: It's not as a blanket. Had you been here previously you would heard my conversations with Mr. Gale, and it depends on the question. I am not going to tell you I'm asserting a blanket privilege, okay?

MR. RYAN: Can we go off the record for a second? I would like to confer with Mr. Gale.

MS. MCINTYRE: That's fine.

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MR. GALE: Something that you probably need to understand, just because I probably wasn't as clear I should have been, I don't necessarily agree with your assertion of the privilege. We might take it up later.

MS. MCINTYRE: I am sure you might.

MR. GALE: I didn't want you to think my silence was assent.

MS. MCINTYRE: I fully expect you will avail yourself of any arguments you have against us.

(A discussion was held off the record.)

(The record was read.)

MS. MCINTYRE: She can answer that.

I am not worried about that. I have no problems. She can answer that.

A: I don't recall being told to —

Q: Did anyone ever have a discussion with you about the contents of the documents in the box?

A: Meaning what was —

MS. MCINTYRE: You may answer yes or no.

Q: Meaning what was written on the pages.

A: Yes.

Q: Were those conversations with lawyers for the Commonwealth?

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A: Yes.

Q: Okay. Were they with Anne Ritter or someone else? Would they have been with Anne or someone else who worked with her, Sally Roy?

A: I have not met her, but I have talked to her on the phone or gotten some communication from her.

MR. GALE: So the record is clear, if I ask her what the content of her discussion was with Anne Ritter about the content of the documents —

MS. MCINTYRE: As I am sure you know, I am not going to let her answer about conversations that reveal the mental impressions of the lawyer. To the extent I wasn't there, it's difficult for me to know if her answering the question is going to reveal the mental impressions of Anne Ritter. I don't know what to do at this point other than to instruct her not to answer to the extent that it does reveal her mental impressions.

MR. GALE: Here's the problem I have got, so it's clear, in case it is not. We have a witness here who's got company documents that were provided to her all highlighted up. She tells me she had conversations with the lawyers about them. She tells me that they were highlighted up the first

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time she got them from lawyers. I am not allowed to ask her about any discussions she had with the lawyers. For all I know the lawyers said, "Here's this document. Here's what you need to say about it." In other words, setting up a witness to testify to what the lawyer tells them.

I don't think Dr. Rigotti is that kind of person or that kind of witness, but the way you are setting it up, there is no way that I can get behind that and figure out what the basis is of any of her opinions and whether it's tainted.

MS. MCINTYRE: Ask her what the bases of her opinions are.

Q: Let me ask you this question, Dr. Rigotti. Did any discussions that you had with any lawyers representing the Commonwealth affect in any way your opinions regarding the content of these documents?

A: No.

Q: Did the lawyers ever point out certain, other than highlighting the document before they were sent to you, did the lawyers ever direct you to any part of any documents and tell you focus on that?

A: No, not other than the fact that they are

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highlighted.

Q: Okay. Did they ever tell you that they were going to send them to you highlighted?

A: No.

Q: Did you ask for them to highlight them for you?

A: No.

Q: When you got them highlighted, why did you assume that they highlighted them for you?

A: I didn't assume. I asked.

Q: What did they tell you?

A: It was to save time, to help me find what I might find to be interesting. It was to help me — I guess I answered that. But I think I am capable of making my own judgments on these things. So if you want to show me something that is not highlighted, I am sure I can express an opinion about it.

Q: Let's take it this way. Let's look at your disclosure statement for a moment, if we could. On the bottom of Page 2, going over to the top of Page 3, it says, "Based on a review of cigarette industry documents contained on Exhibit 2 Dr. Rigotti will testify as follows." Then it lists three sort of

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general opinions there. Do you see that?

A: Yes.

Q: Now, do I understand correctly that at the time this was provided to the counsel for the defendants in mid June, you hadn't looked at the documents yet; is that right?

A: That is true.

Q: But the documents had been provided to you; is that true?

A: I think so. A box had been provided, which presumably had these documents in them.

Q: Had you had any discussion with counsel for the Commonwealth regarding what opinions you might have about these industry documents that you had not yet looked at as of mid June?

MS. MCINTYRE: Objection to the extent your question, I think your question is misleading. You are suggesting that the Commonwealth has told her what to testify to. That is a mischaracterization of the process.

MR. GALE: I am not trying to mischaracterize anything. We got this from you guys in the middle of June. It says she will testify as follows about documents she hadn't seen. So I think

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that's relevant.

MS. MCINTYRE: You asked her and she answered, had you seen documents at the time of this disclosure.

MR. GALE: She also told me that lawyers for the Commonwealth drafted this and sent it to her. I am trying to figure out who had some basis that these were going to be her opinions on documents she hadn't seen yet. I am trying to figure out where it came from.

MS. MCINTYRE: You have asked.

MR. GALE: I am getting —

MS. MCINTYRE: You are there.

A: Well, I saw this when I — what is this called (indicating)?

Q: Disclosure.

A: The disclosure, and I realized that I hadn't read the documents yet. I assumed I would read them at some point, because the statements were consistent with what I had read in the newspaper about the Minnesota trial and what had come out, which I was following with great interest, as everybody else was. I assumed that I would come to the same conclusion.

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Q: Okay. And you base that assumption on things you read in the newspaper?

A: Yes. And the newspaper quoted — would quote from the documents.

Q: Okay. Now, you said there were other things in this box including stuff about the other trials that were going on; is that right?

A: Yes.

Q: Can you be any more specific in terms of what that stuff was? I am trying to figure out what you have been provided.

A: The other thing that was suggested that I look at prior to this

deposition was a copy of the [14] deposition from Jack Henningfield that was done for [15] another trial, and the reason was that — so I would [16] have an idea what a deposition was like since I had [17] no idea.

[18] **Q:** Do you remember which case the Henningfield [19] deposition was in?

[20] **A:** I think it might have been for the Florida [21] trial, but I don't really pay attention to those [22] details.

[23] **Q:** That's fair. Were there any other [24] depositions in there other than the Henningfield

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[1] deposition?

[2] **A:** There might have been. We just went through [3] the box and pulled out that, and I believe the other [4] one we believed was Richard Hertz's testimony in [5] Minnesota.

[6] **Q:** Was that at a deposition or at trial?

[7] **A:** No, that's at trial. I looked at it [8] briefly, but it got — I lost interest quickly.

[9] **Q:** It got boring, is that what you were [10] starting to say?

[11] **A:** Yes.

[12] **Q:** Okay. This box —

[13] **MS. MCINTYRE:** Could we go off the [14] record for one second?

[15] **MR. GALE:** Certainly. [16] (A discussion was held off the record.)

[17] **MS. MCINTYRE:** Okay.

[18] **Q:** So the box that you were sent included [19] Richard Hertz's testimony from Minnesota and Jack [20] Henningfield's deposition and some company [21] documents. Is there anything else that you can [22] recall?

[23] **A:** That's all I know.

[24] **Q:** Were there other things that you just

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[1] haven't gotten to?

[2] **A:** There probably are, because it's a big box [3] and (indicating).

[4] **MS. MCINTYRE:** I think the disclosure is [5] very clear as to what her opinions are going to be [6] based on what materials, okay?

[7] **MR. GALE:** Except it says at the end you [8] reserve the right to supplement the disclosure.

[9] **MS. MCINTYRE:** You will be the first to [10] know if I do.

[11] **MR. GALE:** What I know is no one told us [12] she got the Henningfield deposition or Hertz's trial [13] testimony, and I don't know what else was in the [14] box. I am trying to get as much detail.

[15] **MS. MCINTYRE:** I don't think her [16] opinions will be based on the Henningfield [17] deposition transcript. If they were, it would have [18] been disclosed to you.

[19] **MR. STILL:** There is the Reynolds [20] document.

[21] **MS. MCINTYRE:** There is the Reynolds [22] document that's in the notebook. That was not [23] listed in the disclosure.

[24] **MR. STILL:** That's right.

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[1] **MS. MCINTYRE:** Then there must have been [2] an error in the disclosure.

[3] **MR. GALE:** We will talk about that at [4] the end, I am sure.

[5] **Q:** Okay. Let me ask you some questions about [6] your review of the company documents. Did you make [7] any attempt when you were looking at the company [8] documents to compare statements in those documents [9] to statements that were found in the contemporaneous [10] scientific literature?

[11] **A:** No, I did not.

[12] **Q:** Do you intend to offer any opinions at trial [13] in this case regarding facts or data that the [14] tobacco industry allegedly kept secret?

[15] **A:** Not that I know of

[16] **Q:** Let me draw a hypothetical for you. If [17] there's a statement in a company document, let's say [18] for example it says nicotine is addictive, but there [19] are statements in the published literature at that [20] time the company document was written and even [21] before where scientists, public scientists are [22] saying nicotine is addictive, in your opinion has [23] the tobacco company hidden the facts?

[24] **MR. STROUSS:** Objection.

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[1] **MS. MCINTYRE:** That goes beyond her [2] disclosure. It is here (indicating). She will tell [3] you what opinions she holds based on a review of the [4] company documents.

[5] **MR. GALE:** Maybe we can shortcut this if [6] you can make me a representation —

[7] **MS. MCINTYRE:** No. I am telling you —

[8] **MR. GALE:** This isn't clear at all.

[9] **MS. MCINTYRE:** You are asking her about [10] things that don't appear on her disclosure. Why —[11] you are asking whether she is going to be testifying [12] about what their secret information was?

[13] **MR. GALE:** It says the industry compared [14] cigarettes to narcotics and recognized smoking was [15] dependency-producing and recognized that smokers [16] would like to quit.

[17] **MS. MCINTYRE:** Where is there any [18] disclosure about them hiding these documents?

[19] **MR. GALE:** If you are telling me she is [20] not going to say whether these documents were [21] hidden.

[22] **MS. MCINTYRE:** Where is it in the [23] disclosure? What causes you confusion about whether [24] or not that's going to be part of her anticipated

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[1] testimony?

[2] **MR. GALE:** Well, I am just concerned [3] that later on when she testifies someone will stand [4] and say how much clearer could it that she is going [5] to testify that the cigarette industry recognized [6] smoking was dependency-producing or addictive. [7] Well, they never told me. I don't know if they told [8] anybody else. I am trying to figure out what she [9] understand.

[10] **MS. MCINTYRE:** How is she going to know [11] what lawyers are going to ask her? What if your [12] lawyers ask her that? How is she going to know? [13] This is what she anticipated her testimony to be, [14] okay? That's —

[15] **MR. GALE:** Okay.

[16] **MS. MCINTYRE:** I don't think she can [17] speculate as to what might be asked of her.

[18] **Q:** Let me ask the question a different way. At [19] the top of Page 3 there are three specific opinions [20] listed that you might give at trial regarding [21] company documents. Do you have any basis to give an [22] opinion as to whether the companies knew something [23] that was unknown to the public scientific community [24] at the time those documents were written on those

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[1] topics?

[2] **A:** No. I would have to do additional work, [3] look at dates and compare things and do some [4] research of my own in order to establish that.

[5] **Q:** You have not done that at this point, have [6] you?

[7] **A:** I have not.

[8] **Q:** Is there any scientific conclusion in any of [9] the company documents that you have looked at that [10] you can point to and say this was not known to the [11] public scientific community at the time this [12] document was written?

[13] **A:** When I looked at what's there, I didn't pay [14] a lot of attention to what the dates were. So it is [15] possible that we can go back through them and see [16] there's dates that were early and before as best I [17] know it was known by the

public health community. [18] So I can't tell you for sure.

[19] **Q:** You say as best you know, because you [20] haven't done a point-by-point comparison?

[21] **A:** Right.

[22] **MR. RYAN:** Did you say you did or didn't [23] pay a lot of attention to the dates?

[24] **THE WITNESS:** I didn't pay a lot of

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[1] attention to dates. I remember thinking I should [2] pay attention to these, but I should get an idea of [3] the substance.

[4] **MR. RYAN:** I wasn't clear on your [5] answer. Thank you.

[6] **MR. GALE:** If I can take a five-minute [7] break, I am just about done, but I think some of my [8] co-counsel have questions.

[9] **MS. MCINTYRE:** Sure. [10] (A recess was taken from 3:08 to 3:13 p.m.)

[11] **Q:** Here's what I am going to do. Rigotti [12] Exhibit 2 is the notebook. I would like to keep it [13] in the middle of table. I will stand up so we can [14] both look at the document.

[15] I would just like to ask about a few of [16] the statements in here about a few of the documents [17] and ask what your opinions are about them as best [18] you can formulate. If you haven't formulated an [19] opinion, just tell me so.

[20] The first document is behind a tab that [21] says No. 345. It is a BATCO document on a research [22] conference in Southampton in 1962. Have you [23] reviewed this document before today?

[24] **A:** Before now, yes.

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[1] **Q:** You looked at it earlier this morning?

[2] **A:** Or yesterday.

[3] **Q:** Was yesterday the first time you looked at [4] it?

[5] **A:** Well, I had seen it when I was first given [6] it. I flipped through it quickly.

[7] **Q:** When you flipped through it quickly, did you [8] look at anything other than the highlighting?

[9] **A:** No.

[10] **Q:** When you looked at it last night or today, [11] did you look at anything other than the [12] highlighting?

[13] **A:** Yes.

[14] **Q:** Based on the review that you have done of [15] this document to date, what did you find interesting [16] in the document?

[17] **A:** Can I look at it?

[18] **Q:** Of course you can. That's why I put it in [19] the middle.

[20] **A:** Well, it is 1962. That was before the first [21] Surgeon General's report was out.

[22] **Q:** Right. Are you familiar with the Royal [23] College of Physicians?

[24] **A:** I know there was some document. I don't

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[1] remember exactly when that came out.

[2] **Q:** What's your understanding of what the Royal [3] College of Physicians is?

[4] **A:** I don't know.

[5] **Q:** Have you ever seen a report of the Royal [6] College of Physicians in the past?

[7] **A:** I have not actually seen one.

[8] **Q:** You have read about it?

[9] **A:** I have read about the one that had to do [10] with tobacco that preceded the Surgeon General's [11] report.

[12] **Q:** What did you read about it?

[13] **A:** I think it came to the conclusion, but [14] earlier. That's what my understanding is.

[15] **Q:** Okay. I didn't mean to interrupt you.

[16] **A:** Well, what was your question? What was [17] interesting about this document?

[18] **Q:** Yes, ma'am.

[19] **A:** Well, looking at the highlighted materials, [20] because that is what I looked at primarily, was [21] smoking is a habit of addiction.

[22] **Q:** It's the highlighted text on Page 110070791. [23] Please go ahead.

[24] **MS. MCINTYRE:** Were you finished?

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[1] **Q:** Okay. What is it about that that you found [2] interesting?

[3] **A:** It's 1962 and they're speaking about [4] addiction, that smoking is an addiction.

[5] **Q:** Do you know whether or not the Royal College [6] of Physicians report uses language similar to that?

[7] **A:** I do not know.

[8] **Q:** If I can turn back to the page prior, do you [9] see that this part of this document is a discussion [10] of the report of the Royal College of Physicians?

[11] **A:** Yes.

[12] **Q:** See if there is anything else in that [13] document that you find interesting or noteworthy, [14] and let me know what that is?

[15] (Pause.)

[16] **Q:** As you are reviewing this, I am noticing [17] that the pages that are highlighted in this thick [18] document also have a green tape flag. Did you put [19] those flags on there?

[20] **A:** No. They were on there when I got it.

[21] At this point, this is on 110070802, [22] there's a statement which seems this person's [23] personal opinion about how smoking is a habit of [24] addiction.

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[1] **Q:** What's the significance of that, if any?

[2] **A:** My understanding is that this is from [3] somebody who works for the tobacco companies, since [4] it's a research conference and it says "BATCO" at [5] the bottom. So it's clear that there is a [6] discussion about the addictiveness of nicotine at [7] that point. That at least here's a conference and [8] people are talking about how nicotine is addictive [9] and what effects it might have on the body at the [10] time when the industry was denying the addictiveness [11] of nicotine. At least I know in 1994 at the Senate [12] hearings all the CEOs stood up and said it was not [13] addictive. Yet this would suggest that within the [14] companies people were making these statements.

[15] **Q:** It says this one person made it?

[16] **A:** Yes.

[17] **Q:** Were you shown any documents or have you [18] seen any documents where people at the tobacco [19] companies said internally smoking was not addictive?

[20] **A:** I have not seen them.

[21] **Q:** Do you have any understanding of how many [22] pages of documents the tobacco industry has made [23] available to plaintiffs' lawyers in these lawsuits?

[24] **A:** I know that it is a lot.

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[1] **Q:** In the tens of millions. Do you understand [2] that?

[3] **A:** Yes.

[4] **Q:** Okay. Please go ahead with anything else in [5] this document that you find interesting.

[6] **A:** I think the point is that people were saying [7] this publicly at research conferences. So it was [8] not something that wasn't known within the industry.

[9] **Q:** When you say publically at a research [10] conference —

[11] **A:** Within the company at a research conference. [12] This looks to be a report of somebody who maybe gave [13] a talk.

[14] **Q:** Is it your opinion that if anybody at

a [15] tobacco company said in a room full of people that [16] nicotine is addictive, that that means the tobacco [17] industry as of that day acknowledged internally the [18] addictiveness of nicotine?

[19] **MS. MCINTYRE:** Objection.

[20] **A:** No.

[21] **Q:** What then is the significance of the fact [22] that this one person made this one statement on this [23] day?

[24] **MS. MCINTYRE:** Asked and answered. I

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[1] think she already told you. I don't want — maybe [2] Mr. Gale would like her answer read back to him?

[3] **MR. GALE:** No. I have got it in front [4] of me, and I think I asked a different question. If [5] you want to instruct her not to answer - [6] MS. MCINTYRE: No. I didn't instruct [7] her not to answer. I just am telling you she [8] already answered that question. Could you read back [9] the question?

[10] (The record was read.)

[11] **MS. MCINTYRE:** Do you have anything to [12] add to the fact that the CEOs in 1994 stood up and [13] said this is not addictive?

[14] **MR. GALE:** I object to your coaching the [15] witness.

[16] **MS. MCINTYRE:** I am not coaching the [17] witness.

[18] **MR. GALE:** The transcript will speak for [19] itself.

[20] **MS. MCINTYRE:** You are right.

[21] **A:** This is one person's opinion. My guess is [22] that is the not the only example that one will find.

[23] **Q:** Would you also guess that there are people [24] in the company who expressed a contrary opinion?

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[1] **A:** It's certainly possible. I don't know.

[2] **Q:** Please go on to anything else that you find [3] in that document which is interesting and [4] noteworthy?

[5] **MR. STROUSS:** I object to your asking [6] her repeatedly that question. What do you mean by [7] "interesting and noteworthy"? She has expressed her [8] opinions in relationship to these documents in the [9] disclosure statement. Are you asking beyond what [10] those are?

[11] **MR. GALE:** Well, the purpose of this [12] deposition is to try to figure out what her opinions [13] are going to be at trial.

[14] **MR. STROUSS:** That's a broad-based way [15] to ask what her opinions will be.

[16] **MR. GALE:** When I asked her I got the [17] response that it depends on what I am asked. I [18] don't know what you all are going to ask her, but I [19] can ask her what she thinks is worthy of note in [20] these documents, because then if you ask her about [21] something different at trial, now it's something [22] that when I had chance to examine she didn't point [23] out to me.

[24] **MR. STROUSS:** The rules and agreement

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[1] between the parties clearly set forth the parameters [2] of what the expert opinions are going to be and the [3] forms of these expert disclosure. You know the [4] Mass. Rules of Civil Procedure. Without a [5] supplementation I think that's been covered by the [6] expert disclosure.

[7] **MR. GALE:** Okay. I am still going to [8] ask the questions, unless you instruct her not to [9] answer.

[10] **Q:** Is there anything else that you find [11] noteworthy?

[12] **A:** Not at this point, but I haven't studied [13] these in great detail, as I told you earlier.

[14] **Q:** That's fair. I just need to know what you [15] can tell me today. This is my opportunity to depose [16] you.

[17] **A:** Sure.

[18] **MR. GALE:** Let's move on to the next [19] document. I will note that this document, which is [20] marked down at the lower right-hand corner as 435 is [21] a July 17, 1963 memorandum entitled " Implications of [22] Battelle HIPPO I & II and the Griffith filter." I [23] also note for the record that my client continues to [24] assert an objection to use of this document at trial

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[1] or showing this document to a witness because we [2] believe it to be privileged, subject to both the [3] attorney-client privilege and attorney work product [4] privilege. We understand the court has ruled [5] otherwise at this point, but I want everybody to be [6] clear I am not waiving anything based on the fact [7] that you gave the document to your witness.

[8] **Q:** When is the first time you looked at this [9] document, Doctor?

[10] **A:** When I set eyes on it, when I first got it, [11] and I looked at it in more detail yesterday.

[12] **Q:** Did you look at anything other than the [13] highlights?

[14] **A:** No.

[15] **Q:** Did you draw any conclusions about it the [16] first time you look at it?

[17] **A:** I don't remember that I did.

[18] **Q:** What conclusions have you drawn about this [19] document now, this document being the July 17, 1963 [20] memo?

[21] **A:** I need to look back and see what it says.

[22] **Q:** Please do.

[23] **A:** Here's an interesting package. It's the [24] second-to-last page.

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[1] **Q:** It looks like Page No. 4. Does that look [2] right to you?

[3] **A:** Yes. It's hard to tell. It looks like this [4] has been copied a few times. There is a statement [5] that says nicotine is addictive. This was quoted in [6] the press a bunch, I think. "We are in the business [7] of selling nicotine, an addictive drug," et cetera, [8] et cetera.

[9] **Q:** Do you know who the author of this document [10] is?

[11] **A:** Let me see if it says so. Actually at the [12] end it says "A.Y." I don't know who A.Y. is.

[13] **Q:** Do you have any understanding of what [14] position A.Y. held within the company?

[15] **A:** No, I don't.

[16] **Q:** Do you know what company A.Y. even worked [17] for?

[18] **A:** No, I don't.

[19] **Q:** Would it make a difference to you whether [20] A.Y. was a scientist or not a scientist in judging [21] the importance of this particular document?

[22] **A:** A little bit.

[23] **Q:** How so?

[24] **A:** I guess a scientist might have a little more

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[1] credibility in terms of making certain statements [2] about addiction.

[3] **Q:** So if this person was not a scientist would [4] you ascribe less credibility to that statement?

[5] **A:** It depends on who the person was and what [6] their position was. I know people who are not [7] scientists who say in public health — who are [8] perfectly capable of making informed judgments about [9] things like this.

[10] **Q:** Okay. Based on what you can figure out from [11] the face of that document, do you have any idea [12] whether this person is a scientist or not or knows [13] of what he speaks?

[14] **A:** It looks like they know what they're talking [15] about. They are quoting the Surgeon General, the [16] Public Health Service, the American Cancer Society [17] and are quoting the Surgeon General's report and [18] seem to un-

derstand what they were talking about.

Q: Have you finished your answer?

A: I am done.

Q: Was there anything else in that document other than the portion that you read to me?

A: Not that I am prepared to comment on at the moment.

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Q: That's fair. The next document is marked 1045 in the lower right-hand corner. It's titled "Year 2000 comments on final report." I notice the first page has a lot of highlighting on it and some subsequent pages. Maybe that is the only page that has any highlighting.

A: There were a lot of hand-drawn charts in here and — there is another one. This had to do with the relationship between lung cancer and the amount of cigarette smoking?

Q: Do you plan to give any testimony in this case about disease causation from cigarette smoking.

A: It is not in the deposition [sic], so I'm assuming I am not going to be asked about it.

Q: When you say "deposition," are you referring to your disclosure statement?

A: Yes. Sorry.

Q: I understand. Is there anything in this document that you see that you believe relates to the opinions that are disclosed in your disclosure statement?

A: Good question. Let's see.

This person seems to arguing that lower risk cigarettes — in other words, low yield

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cigarettes I assume, will not have the effects that some had hoped. I think that's what a thoracic surgeon's saying. I am not sure what the point of this one is. I haven't read it carefully, but on looking at what's highlighted, I don't see the point. It doesn't mean I won't see the point when I look at it a little more carefully.

Q: For purposes of your testimony here today you don't know what the point is as it might relate to your opinions?

A: I am not quite sure what the point here is.

Q: Okay. Let's look at the next one. This is document that's entitled " Final report on project HIPPO II." Have you seen this document before?

A: Yes.

Q: Have you read it?

A: Yes.

Q: Do you know what the Project HIPPO II is?

A: I am not sure I do. I am sure it is explained in the document.

Q: How much of this document have you read in the past? Have you just read the highlights?

A: I read the highlights, and I think I started looking at some of the other stuff as well.

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Q: How is this document relevant to your opinions?

A: Okay. This one, this includes some fairly sophisticated — the date is 1963 — sophisticated physiologic measures of the effect of I believe it's nicotine and comparing it to reserpine, also used as an anti-hypertensive, on various body symptoms. I am surprised that this work was being done so early.

MS. MCINTYRE: Can the witness sit down? I'm afraid she thinks she can't sit down.

Q: Dr. Rigotti, stand up, sit down, whatever way you are comfortable.

A: There is the chart comparing the brain serotonin in people and they are looking at neurotransmitters in the brain associated with reserpine in association with nicotine and comparing the two.

Q: Do you know whether other work was being published at or about that same time that dealt with levels of brain neurochemicals in response to drugs?

A: I don't know. I am surprised that it is so early. So I wasn't aware that this work was being done in the medical community or the public health community at the time.

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Q: Are you familiar with the work of Katz and Thesleff from the late 1950s looking at the neurochemical function in the brain in response to nicotine?

A: No.

Q: Is there anything else in the report, final report on HIPPO II that is relevant to your opinions?

A: No.

Q: What is the next one?

A: 4941.

Q: For the record this appears to be a Philip Morris internal memorandum written by Al Udow, which starts with a Bates number 100077089, dated June 2, 1976. Why is this document relevant to your opinions, if it is? Have you read this document before?

A: I have looked at parts of it.

Q: The highlighted parts?

A: Yes, and a little more of it. This document looks at why people start to smoke and talks about the fact people — it talks about the fact that this person who wrote this memo was aware people began to smoke before the age of 18, and looks into reasons

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why those might be, and does a research paper and refers to some various other papers.

Q: Was it understood by 1975 in the scientific community generally that people started to smoke at under the age of 18?

A: I am not sure, but I think so.

Q: Was that something that the public health community was studying at the time that you were in medical school, for example?

A: I don't know.

Q: Is there anything else in that document that you think is relevant to your opinions?

A: They talk about how it's a survey of smokers and why they smoke, and they talk about how it is a tranquilizer, sedative, a narcotic, something that is done in times of stress, and that the respondents endorse that, but more than endorse the behavioral type answers, like it gives me something to do with my hands.

Q: What's the significance of that in your mind?

A: That smokers, presumably young smokers were telling someone, telling people and the industry knew about the fact that there was an addictive

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component to their smoking.

Q: So that I am clear, you don't have any understanding of whether young smokers were telling public health scientists or researchers the same thing at the same general time?

A: I don't. (A recess was taken from 3:40 to 3:48 p.m.)

MR. GALE: Have we moved on to the next document now?

MS. MCINTYRE: I am not sure where we were.

Q: The last document we talked about was this memo written by Al Udow. The next document is a Lorillard document. I will save that for Mr. Ryan. The next document after that is a handwritten document numbered 9579. Do you know who wrote this?

A: No.

[18] **Q:** Do you know who Jet Lincoln is?

[19] **A:** No.

[20] **Q:** Do you know whether Jet Lincoln worked for [21] any tobacco company?

[22] **A:** No. I assume since this is the tobacco [23] company documents, this has something to do with the [24] tobacco companies. I assume it's an internal memo,

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[1] but I don't know for sure.

[2] **Q:** I note that the only numbers, identifying [3] numbers on this document are down in the lower [4] right-hand corner, 9579; is that right?

[5] **A:** Yes.

[6] **Q:** Do you know whether Ness Motley put the 9579 [7] on there?

[8] **A:** I don't know how it got there.

[9] **Q:** Your only understanding that this came from [10] tobacco company files is it was provided to you by [11] Anne Ritter?

[12] **A:** Yes.

[13] **Q:** There is nothing else on that that would let [14] you know that it was written by a tobacco company [15] employee as opposed to somebody else?

[16] **A:** No. Or than the things that are on it that [17] seem to refer to things in tobacco products.

[18] **Q:** Fair enough. There is one highlighted [19] statement on that page. Is that the one thing that [20] you find relevant to your opinions on this document?

[21] **A:** Yes.

[22] **Q:** Okay. How is it relevant?

[23] **A:** It speaks to the notion that the industry [24] thought tobacco or nicotine was

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[1] dependence-producing.

[2] **Q:** You say that the industry thought —

[3] **A:** Well, based on my assumption that this is a [4] tobacco industry document, then it seems someone in [5] here was talking about the fact that nicotine keeps [6] a man hooked, which would seem to indicate [7] addiction.

[8] **Q:** This is a one-page handwritten document; is [9] that right?

[10] **A:** Yes.

[11] **Q:** Let's go to the next one. This is another [12] Lorillard document. I will save that for Mr. Ryan.

[13] The next document is dated February 18, [14] 1983. It looks like it is a Philip Morris [15] interoffice memorandum from Myron Johnston to Al [16] Udow. It has a number on it, 12900. Have you seen [17] this document? Have you read it before today?

[18] **A:** I read it yesterday.

[19] **Q:** Was that the first time you read it?

[20] **A:** Yes.

[21] **Q:** What if anything do you find relevant about [22] this document as it relates to your opinions?

[23] **A:** It's speaking to the relationship between [24] nicotine and other addictive drugs.

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[1] **Q:** When you say "relationship between," what do [2] you mean?

[3] **A:** The relationship between — the patterns of [4] use between nicotine and other drugs.

[5] **Q:** Do you mean comorbidity or something else?

[6] **A:** No, not necessarily comorbidity.

[7] **Q:** Why are the statements in that document [8] relevant to you in what you plan to say at trial?

[9] **A:** Well, they speak to how the industry [10] compared itself to narcotics.

[11] **Q:** Was there anything else in that document [12] that you find relevant?

[13] **A:** No.

[14] **Q:** What's the next document in the notebook?

[15] **A:** 12903.

[16] **Q:** What's that one?

[17] **A:** It says "Philip Morris U.S.A. interoffice [18] correspondence" to Mr. Chris Bolton from Al Udow, [19] who has been in here before, on the chemistry of [20] Kool and a recommendation. This again speaks to the [21] fact that people looked upon cigarettes as having a [22] narcotic effect. It talks about — about whether [23] that effect comes from nicotine or tar. It seems to [24] imply that it is really the nicotine that matters in

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[1] terms of the drug effect.

[2] **Q:** Okay. When is first time you read this [3] document, other than the highlighted portions?

[4] **A:** I looked at — I mean I looked at the chart [5] here. This is a two-page document.

[6] **Q:** Basically the whole first page is [7] highlighted?

[8] **A:** Yes. The second page has the data they are [9] commenting on.

[10] **Q:** That's fair. When is the first time you [11] read this document?

[12] **A:** Yesterday.

[13] **Q:** Turn the page to the next one.

[14] **A:** This is 20464. It is a memo to D.A. [15] Calleson from the flavor laboratory. It's a [16] one-page memo dated 1965.

[17] **Q:** What does it say that you find relevant?

[18] **A:** It mentions that cigarettes have a low-level [19] narcotizing effect, meaning that the industry is [20] looking upon it as something that has an effect [21] similar to narcotics.

[22] **Q:** When you say "the industry" —

[23] **A:** This individual who wrote it from the flavor [24] laboratory, whoever that is, seems to be referring

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[1] to a taste test of L&M cigarettes.

[2] **Q:** Is there anything else in that document that [3] you find relevant to your opinions?

[4] **A:** No.

[5] **Q:** What is the next one?

[6] **A:** 21176.

[7] **Q:** What document is that?

[8] **A:** A Philip Morris interoffice memo to R.B. [9] Seligman from T.S. Osdene, some comments about the [10] CTR program.

[11] **Q:** What's the date of that document?

[12] **A:** This is 1977.

[13] **Q:** Okay.

[14] **A:** What this one says is that it quotes someone [15] at the CTR — I assume that is the Council for [16] Tobacco Research — saying that someone is making [17] the statement that opiates and nicotine are similar [18] in action. "We accept the fact that nicotine is [19] habituating." It is the relationship between the [20] nicotine and the opiates. It reinforces the point [21] that these other documents have made that nicotine [22] is addictive and it can be compared to other drugs. [23] This is 1977. I think that's what's interesting [24] about it. It's being stated in here, and there is

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[1] some concern about people saying that out loud.

[2] **Q:** Okay. Is that among the language that was [3] highlighted for you when the documents were sent to [4] you?

[5] **A:** The statements are, but below, I do [6] understand the context. I read the rest of the [7] page.

[8] **Q:** Okay. What's the next one?

[9] **A:** 36291.

[10] **Q:** What's that document?

[11] **A:** It called "the cigarette consumer." It's [12] dated 1984.

[13] **Q:** Do you know what tobacco company if any that [14] one comes from?

[15] **A:** It doesn't look like it is going to say. It [16] says it is from RPMRTCC, whatever that.

[17] Q: What if anything do you find relevant in [18] that document?

[19] A: Well, it's a presentation about who smokes [20] and who wants to quit. It looks to suggest that [21] low-income people are more likely to smoke.

[22] Q: Is that a fact that was known to the public [23] scientific community in 1984?

[24] A: I believe so. This data seems to be public

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[1] knowledge. That statement seems to be public [2] knowledge.

[3] Q: Okay.

[4] A: There are percentages of brand switching, [5] which is interesting.

[6] Q: How is that relevant to any opinions?

[7] A: To my opinions that I am going to give? I [8] am not sure, to be honest with you. I was telling [9] you what I found interesting.

[10] Q: That's fair.

[11] A: I am not sure how this is one is relevant at [12] this point.

[13] Q: Good enough. The next document that you [14] come to is an R.J. Reynolds document that is [15] privileged. I will wait and let Mr. Still ask you [16] ask you questions about that.

[17] A: That's the last one.

[18] MR. GALE: So I don't have any further [19] questions for you today, Dr. Rigotti, and I very [20] much appreciate your time.

[21] There is a brief thing I would like to [22] say on the record. To the extent that Dr. Rigotti [23] is shown any further documents, we would reserve the [24] right to depose her and ask her questions about

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[1] those documents.

[2] Furthermore, to the extent she was [3] provided documents in addition to those that have [4] been disclosed to us as having been provided to her, [5] we would like to see those documents that have been [6] provided to her by lawyers for the Commonwealth in [7] order to prepare her to testify in this litigation.

[8] As to the other issues that came out [9] during her examination, in terms of, you know, how [10] the documents were provided to her and in what form [11] and at what time she reviewed them in relationship [12] to when her expert disclosure was produced to us, [13] we're certainly going to reserve all our rights on [14] that.

[15] We will sit down and read this [16] transcript carefully and decide what's the [17] appropriate response, but for today I appreciate [18] your time very much, Doctor, and I will pass the [19] witness to Mr. Still.

[20] EXAMINATION

[21] BY MR. STILL:

[22] Q: Hello, Dr. Rigotti. A couple of quick [23] points on the last document in that batch. What is [24] the title of that document?

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[1] A: "RJR research and development activity fact [2] team memorandum."

[3] MR. STILL: Let me see. This was not [4] among the documents that plaintiff designated form [5] the base of your opinions for this deposition. Also [6] it is Reynolds' opinion that this document [7] constitutes work product. We continue to assert the [8] privilege and object to its use.

[9] Q: Dr. Rigotti, when did you first receive this [10] document?

[11] A: When I got the rest of the notebook, which [12] as we went over was several weeks ago.

[13] Q: And have you had the opportunity to read [14] that document?

[15] A: No. It was at the bottom, and it's long. I [16] probably flipped through it, but I don't remember [17] very much about this one, to be honest with you. I [18] don't know if I actually looked at it.

[19] MS. MCINTYRE: Could I correct a [20] misimpression that might be on the record. The fact [21] that it's not on this disclosure is accurate. It's [22] not something that she is going to rely on for her [23] testimony.

[24] MR. STILL: That particular document?

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[1] MS. MCINTYRE: No.

[2] MR. STILL: To the extent she plans to, [3] we reserve the right to continue the deposition at [4] such time and we reserve our right to have a [5] reasonable opportunity to review material and ask [6] her questions about it. Those are all the questions [7] I have. Thank you, Doctor.

[8] EXAMINATION

[9] BY MR. RYAN:

[10] Q: Doctor, I only have about ten minutes.

[11] MR. RYAN: Could I stand behind her?

[12] MS. MCINTYRE: I can offer you my copy.

[13] MR. RYAN: I will stand behind you.

[14] Q: Can you flip back to Document 7386?

[15] A: Okay.

[16] Q: Did you have the opportunity to review this [17] document?

[18] A: Let me see. I didn't look at it very, in [19] much detail. I flipped through it.

[20] Q: Looking back to the first page of the [21] document, would you agree with me that this document [22] was not prepared by the Lorillard Company, but by an [23] outside company for the Lorillard Company?

[24] A: It says it was prepared for the Lorillard

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[1] Company.

[2] Q: Calling your attention to the very bottom of [3] the first page of the document. It's not a very [4] good copy. Would you further agree it appears to [5] say "summer of 1964" as the date of document?

[6] A: Maybe. I mean I can't read it.

[7] Q: It is so illegible you can't make out [8] "summer of 1964" at the bottom?

[9] A: No.

[10] Q: For the next couple of questions I am going [11] to ask you to assume this document was in fact [12] issued in the summer of 1964.

[13] Did you have the opportunity to read [14] through the document long enough to determine [15] whether or not it's a marketing survey or not?

[16] A: That is what the objectives are, it says [17] here.

[18] Q: Okay. You will agree with me this document [19] purports to be a marketing study prepared for the [20] Lorillard Company?

[21] A: Yes.

[22] Q: What specific pages of this document have [23] you looked at?

[24] A: Well, I looked at the one that's

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[1] highlighted, 03492854.

[2] Q: From reading that page, did you learn [3] anything that might be relevant to your opinions in [4] this case?

[5] A: It's a definition of what a qualified smoker [6] is who is 16 years of age or older. I am not quite [7] sure what the relevance is other than it speaks to [8] the fact that people 16 years old were smoking eight [9] cigarettes a day, at least some.

[10] Q: In the summer of 1964 do you know whether it [11] was legal in any of the 51 jurisdictions within the [12] United States for people age 16 to smoke, purchase, [13] possess or be sold cigarettes and tobacco products?

[14] (The record was read.)

[15] A: I don't know what all the state

ages of [16] purchase laws were at that point.

[17] **Q:** Would it —

[18] **A:** Age of sale.

[19] **Q:** Do you have any disagreement as late as 1969 [20] that it was legal for a person 16 years of age to [21] purchase, possess, use and be sold tobacco products [22] in at least 14 jurisdiction within the United [23] States?

[24] **MR. STROUSS:** I am going to object to

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[1] the form. I don't know how the witness could answer [2] that. If you can, Doctor, go ahead.

[3] (The record was read.)

[4] **A:** I don't know the answer to that. I don't [5] know that it is true, and I don't know that it is [6] not true.

[7] **Q:** I want you to assume for the purpose of my [8] question that it was in fact legal when this [9] document was issued for at least a dozen states for [10] people age 16 to use, purchase, and be sold tobacco [11] products. Does the page that you referenced a [12] moment ago in your testimony continue to hold the [13] same significance to you in light of that fact that [14] I want you to assume?

[15] **A:** Yes, I think it does.

[16] **Q:** It does continue to have significance for [17] your opinions?

[18] **A:** Yes.

[19] **Q:** On what basis?

[20] **A:** Just because it's legal to sell it in some [21] states doesn't mean that it is a good thing to be [22] doing.

[23] **Q:** The page of Document 7386 that we have been [24] referring to is significant to you because it's not

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[1] a good thing to market cigarettes to people who are [2] legally allowed to buy them?

[3] **A:** Well, they are not legally allowed to buy [4] them everywhere. Actually, it's the other way. [5] It's not legal to sell them to people of that age. [6] The laws are restrictions on sales, not on [7] purchasing.

[8] **Q:** Okay. Let me ask the question again, given [9] that's your understanding. Given it is legal to [10] sell tobacco products to people under the age of 16, [11] you still feel it is not a good thing for a company [12] to market its product if it is legal to sell those [13] products to persons of that age?

[14] **A:** It's difficult to say this. You are having [15] me assume it's a very old document, and it's hard [16] not to speak to it with the understanding that I [17] have today of what's a good thing and what a bad [18] thing to do, what the position of company is and the [19] public health community is. I think I can't say.

[20] **Q:** Then given what you just said, as you sit [21] here today in 1998 do you think that it's a bad [22] thing for a company, for a tobacco company to [23] produce its products to 16-year-olds, correct?

[24] **A:** Yes. It is illegal to sell to 16-year-olds,

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[1] now.

[2] **Q:** In light of what you just told me a moment [3] ago, it is safe for me to say you don't have an [4] opinion as to whether or not that was a good thing [5] in the summer of 1964?

[6] **A:** To the extent in 1964 I knew and — 1964 is [7] when the Surgeon General's report came out. I don't [8] know if it came out in the spring or winter. I [9] don't know which came out first. Given that we knew [10] smoking was — many people knew that smoking was [11] hazardous to people's health, maybe it wasn't a good [12] thing to encourage young people to start smoking.

[13] **Q:** Is there anything else in that document that [14] you regard as relevant to the opinions —

[15] **A:** Not at this point.

[16] **Q:** — you expect to express in this lawsuit?

[17] **A:** Not at this point.

[18] **Q:** Referring to your disclosure, Page 3 of that [19] disclosures. I don't recall what exhibit that is. [20] It looks like you have a copy of it in front of you. [21] The second bullet point indicates that Document [22] 7386, that you will rely on that document that [23] establishes that the cigarette industry recognized [24] smoking was dependence-producing or addictive.

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[1] As you sit here today, is there anything [2] in that document that will support your opinion that [3] the cigarette industry recognized smoking was [4] dependence-producing or addictive?

[5] **A:** Not to the extent that I have reviewed it, [6] no.

[7] **Q:** Could you turn to Document 12486. What if [8] any significance does this document have for the [9] opinions you express, you intend to express in this [10] lawsuit?

[11] **A:** This supports a contention that the industry [12] knew that nicotine — that smoking was addictive.

[13] **Q:** Is there a passage or a sentence that you [14] can quote from that document that supports the [15] opinion you just said?

[16] **A:** Sure. "Indications are that the smoker [17] adjusts his smoking habits to satisfy the desire for [18] nicotine either by frequent or large puffs on the [19] cigarette or smoking a large number of cigarettes."

[20] **Q:** You say that sentence supports — the idea [21] that people smoke to maintain a certain nicotine [22] levels. Could you read the sentence just before the [23] one you read?

[24] **A:** "Cigarette sales are made for one reason.

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[1] The customer is satisfied with the product either [2] from the taste or the physiologic satisfaction [3] derived from the smoke."

[4] **Q:** That's not the sentence right before the one [5] you read.

[6] **A:** "The consensus of opinions derived from a [7] review of the literature on the subject indicates [8] that the most probable reason for the addictive [9] property of smoke is nicotine."

[10] **Q:** Would you agree that the opinion quoted in [11] that sentence you just read represents a consensus [12] of opinion derived from a review of the literature?

[13] **A:** I am not sure what literature he is [14] referring to. It could be — I don't know if this [15] was literature that was widely available to everyone [16] or literature — whoever M.S. Ireland is.

[17] **Q:** From your reading of that sentence is M.S. [18] Ireland expressing his or her opinion or is M.S. [19] Ireland expressing the consensus of opinion derived [20] from a review of the literature?

[21] **A:** It's a consensus opinion from a review of [22] the literature.

[23] **Q:** Do you know who M.S. Ireland is?

[24] **A:** No.

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[1] **Q:** Do you know who Dr. H.J. Minnemeyer is?

[2] **A:** No, I don't.

[3] **Q:** Do you know whether one or both of them or [4] scientists?

[5] **A:** Well, the subject says, "a research proposal [6] development of assays for free nicotine." So I had [7] made an assumption when I read this that Ireland at [8] least was a researcher or a scientist. It also [9] references the scientific literature. I assume this [10] was from someone who was a scientist.

[11] **Q:** Doctor, I think you testified earlier that [12] you have never been a smoker. Have you ever tried [13] smoking?

[14] **A:** I tried a cigarette once.

[15] Q: How old were you?

[16] A: I don't remember, but it was after I was [17] already in interested in tobacco control. So I [18] thought I should have an experience to see what [19] everyone was doing and why.

[20] Q: Can you give me estimate as to how old you [21] were?

[22] A: I would say I was in my late twenties.

[23] Q: Why did you smoke the cigarette?

[24] A: Because I wanted to see what people

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[1] experienced when they smoked, since I was trying to [2] understand how to help people not to do it.

[3] Q: That's the only cigarette that you have ever [4] had?

[5] A: Yep.

[6] Q: Describe for me if you will the experience?

[7] A: It was very strong. It was almost [8] intoxicating, in the sense that it I felt a buzz, I [9] guess.

[10] Q: Were you sitting or standing?

[11] A: Sitting down. I remember thinking to myself [12] I don't know how people can drive and do this, but I [13] understood at that point, knowing what I did, that [14] the reason they could do it was because they become [15] tolerant, and I thought if I didn't know what I knew [16] this might be fun.

[17] Q: You found the effects of smoking the one [18] cigarette that you had in your life to some extent [19] pleasurable or in your words fun?

[20] A: I don't know about pleasurable. It was a [21] strong and a different experience. It was [22] interesting. I wouldn't say so much pleasurable. [23] Just interesting.

[24] Q: At any time prior to the incident you just

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[1] described, were you ever pressured to have a [2] cigarette? Did you ever feel pressured to have a [3] cigarette?

[4] A: No.

[5] Q: In high school, for example, did any of your [6] friends smoke?

[7] A: I don't recall that any did.

[8] Q: When can you first recall hearing that [9] smoking was bad for your health?

[10] A: I think in junior high school.

[11] Q: How did you hear it if you can recall?

[12] A: I don't recall, but I do remember them [13] showing a movie in science class about lung cancer [14] and showing a thoracotomy, an operation of a lung [15] cancer victim, having a lung taken out and sort of a [16] scare tactic kind of movie. That was common in [17] those days.

[18] Q: One of the points that the film made was [19] that smoking was bad for your health?

[20] A: Yes.

[21] Q: From that point forward throughout your life [22] have you continued to hear or read that smoking is [23] bad for your health?

[24] A: Yes.

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[1] Q: Since you first heard that smoking was bad [2] for your health, have you seen television [3] commercials and television shows that have told you [4] that smoking is bad for your health?

[5] A: I have seen commercials. I have seen the [6] counter-advertising commercials that Massachusetts [7] has done, yes.

[8] Q: Since you first saw this film on smoking in [9] junior high school, have you read numerous articles [10] in the newspapers, magazines that smoking is bad for [11] your health?

[12] A: Yes.

[13] Q: In your work at the smoking cessation [14] clinic, have you ever been told by a patient that [15] they have never heard that smoking is bad for their [16] health?

[17] A: What many smokers say is that they know that [18] smoking is bad for people's health. They may not [19] believe that it is bad for their health, and that's [20] the part of the denial that allows them to keep [21] smoking. So they know for smokers out there, but [22] they think they are somehow different and that's [23] keeps many people smoking.

[24] Q: From your treatment of patients at the

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[1] smoking cessation clinic, how have they learned that [2] smoking is bad for people's health?

[3] MS. MCINTYRE: Objection.

[4] A: I am not sure I asked. So I don't know that [5] I know the answer to at that.

[6] Q: Has anyone ever told you how they learned [7] that smoking was bad for people's health?

[8] A: I don't recall that they have.

[9] Q: When patients present to you in the smoking [10] cessation clinic, what is the number one reason they [11] tell you why they want to quit smoking?

[12] A: Most of the people who present to us as [13] someone who comes to a doctor for this problem, it's [14] because of health reasons.

[15] Q: Do any of the patients who come to the [16] clinic for health reasons tell you how they learned [17] that smoking or quitting smoking would be good for [18] their health?

[19] A: Yes. They usually heard it from their [20] doctors, and if they didn't they heard it from me.

[21] Q: Has any patient ever told you that you were [22] the first to tell them that smoking was bad for [23] their health?

[24] A: Not that I recall, but I think people have

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[1] told me that I might have been the first one they [2] believed.

[3] Q: I am going to ask you some final questions [4] that might be a little difficult, and I apologize [5] for asking them, but I don't think I will be serving [6] my client if I didn't.

[7] You testified earlier that your father [8] died of because of lung cancer. When did he die?

[9] A: He died — I am not exactly sure. I think [10] it was '94.

[11] Q: Did he smoke up until his death?

[12] A: No. He quit 27 years before he died.

[13] Q: Why did he quit?

[14] A: He quit when he turned 50 because his best [15] friend had a sudden death on the eleventh green at [16] the golf course.

[17] Q: As a physician have you ever formed a belief [18] as to what caused your father's lung cancer?

[19] MR. STROUSS: Objection. That's beyond [20] the scope of this, clearly. I have to let you [21] answer, but I want the record to reflect my [22] objection.

[23] A: It's an interesting question as to whether [24] it was a smoking-related cancer since he had quit

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[1] for such a long time, but we need to presume that it [2] was.

[3] Q: So you presumed that your father's lung [4] cancer was caused by his smoking history?

[5] A: Yes. I assumed that is the case. There [6] wasn't any other exposure that we knew of that would [7] explain it, and we know the risk of lung cancer [8] never goes back to zero after you stop smoking.

[9] Q: Prior to the date 27 years ago when your [10] father quit smoking, had you ever asked him to quit [11] smoking?

[12] **A:** I don't recall whether I did or not. I [13] remember that he smoked and that I didn't like the [14] smoke, but those were the days before kids were [15] taught in school to bug their parents about their [16] smoking.

[17] **Q:** Did your father smoke after 1964 when the [18] first Surgeon General's report regarding smoking?

[19] **A:** I have to figure this out.

[20] **MR. STROUSS:** You already testified [21] what his smoking history was.

[22] **MS. MCINTYRE:** 27 years before his [23] death, which was in 1994.

[24] **MR. RYAN:** She wasn't clear on the date.

[1] **MS. MCINTYRE:** That was an [2] approximation.

[3] **A:** I think he quit a couple years after the [4] Surgeon General's report.

[5] **Q:** Do you know if he quit — you testified [6] earlier that he quit because a friend of his died [7] while golfing. Do you know if the Surgeon General's [8] report regarding smoking and health that was issued [9] in 1964 played any role in his decision to quit?

[10] **A:** Yes, it did. He told me it was one of those [11] things — where he knew that it was one of those [12] things he would have to do at one point. As often [13] is the case with a smoker it takes some acute event [14] that brings it to their attention and says, gee, [15] that could happen to me too.

[16] **Q:** Do you know what brand of cigarette your [17] father smoked?

[18] **A:** Yes, I do. I don't know who makes it, [19] because I don't pay attention to those things.

[20] **Q:** In any way do you blame the tobacco industry [21] or the cigarette companies for your father's death [22] from lung cancer?

[23] **MR. STROUSS:** Objection.

[24] **A:** You know, I have never thought about that.

[1] I guess I don't. I think it was unfortunate, and I [2] think he — my father started smoking at a time when [3] he didn't understand that it was bad for him, and [4] pretty soon after it became public knowledge that it [5] was bad for him he quit, and it's unfortunate that [6] he probably died as a result of the accumulated [7] damage that had been done before.

[8] **Q:** Okay. But in light of that, do you as you [9] sit here — you indicated that you hadn't given much [10] thought to it. So I am asking you to think about [11] it. Do you assign any blame for your father's lung [12] cancer to the companies who made the cigarettes that [13] he smoked?

[14] **MR. STROUSS:** Objection. It has been [15] asked and answered.

[16] **A:** I don't.

[17] **MR. RYAN:** That's all I have. Thank [18] you.

[20] (The deposition was adjourned at 4:27 p.m.)

DEPONENT'S ERRATA SHEET & SIGNATURE

The original of the Errata Sheet has been delivered to Lisa Movitz. When the Errata Sheet has been completed by the deponent and signed, a copy thereof should be delivered to each party of record.

INSTRUCTIONS TO DEPONENT

After reading this volume of your deposition, indicate any corrections or changes to your testimony and the reasons therefor on the Errata Sheet supplied to you, and sign it. DO NOT make marks or notations on the transcript volume itself.

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COMMONWEALTH OF MASSACHUSETTS)
SUFFOLK, SS)

I, Deborah L. Roth, Certified Shorthand Reporter and Notary Public in and for the Commonwealth of Massachusetts, do hereby certify that there came before me on October 1, 1998, the person hereinbefore named, who was by me duly sworn to the truth and nothing but the truth concerning any knowledge in this cause; that that person was thereupon examined under oath, and the examination reduced to typewriting under my direction; and that the deposition is a true record of the testimony given by the witness.

I further certify that I am neither attorney or counsel for, nor related to or employed by any attorney or counsel employed by the parties hereto or financially interested in the action.

In witness whereof, I have hereunto set my hand this 1st of October.

DEBORAH ROTH
Notary Public
My commission expires:
March 2, 2001